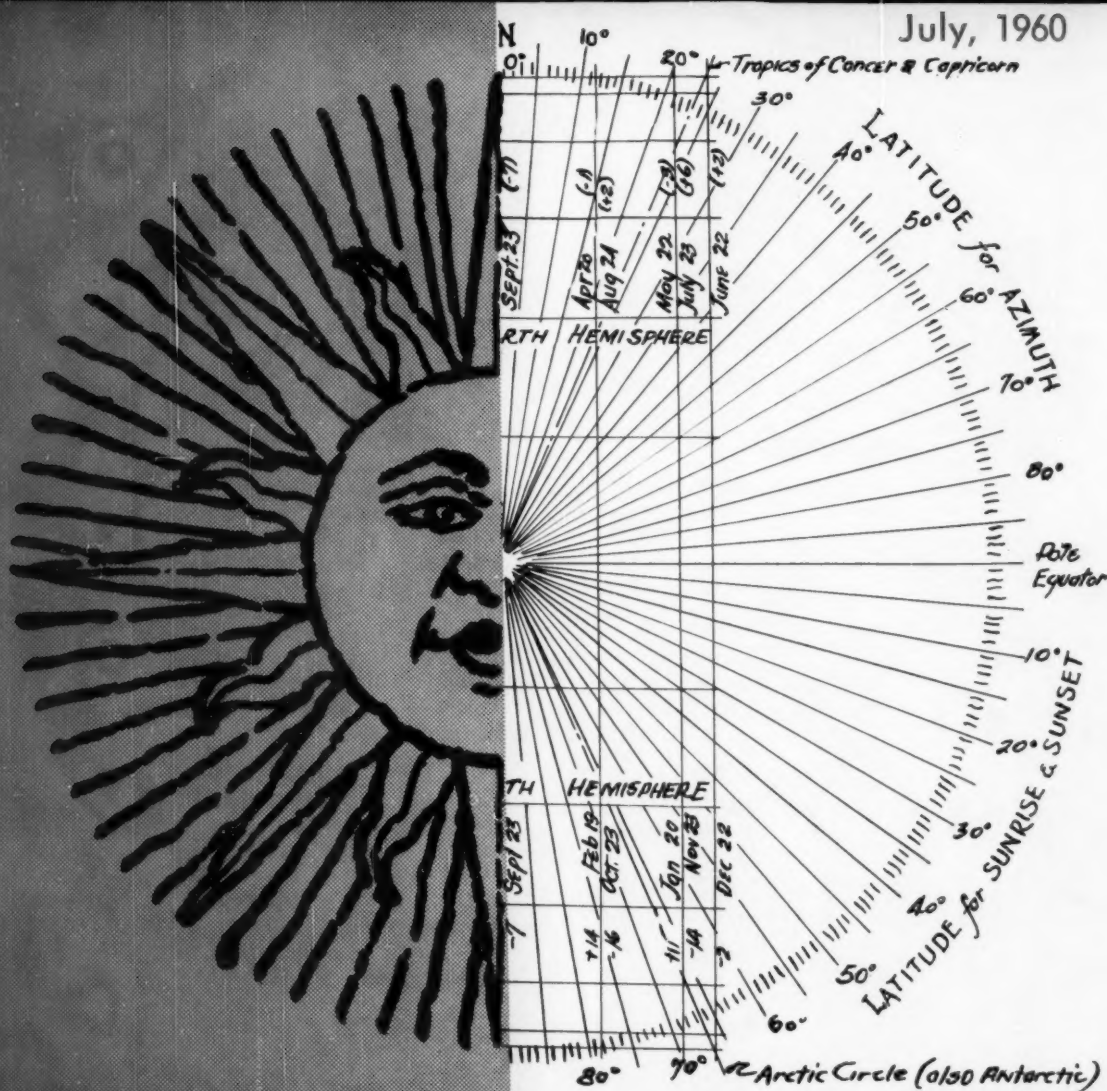
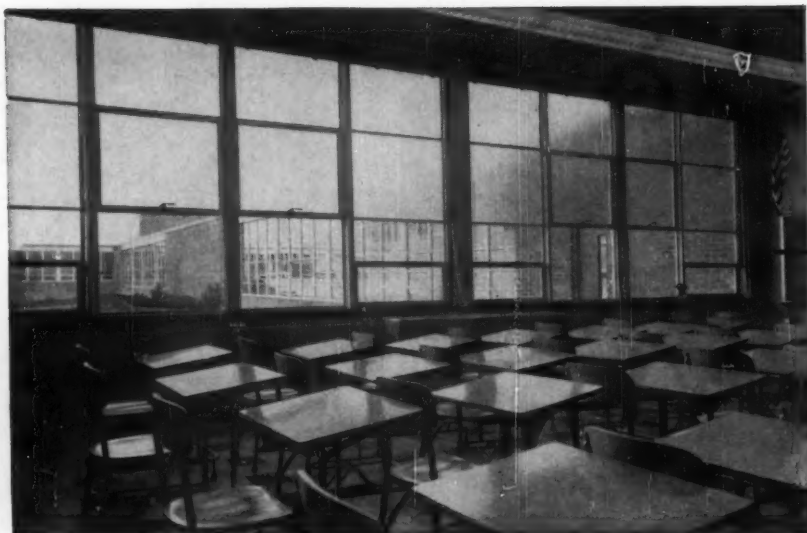


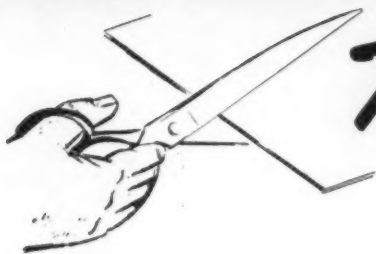
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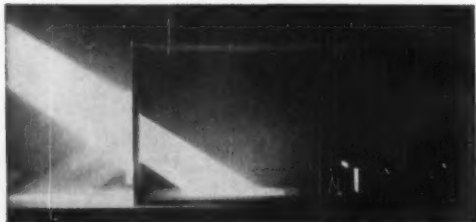




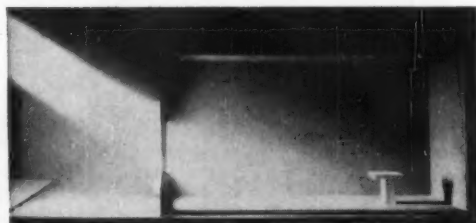
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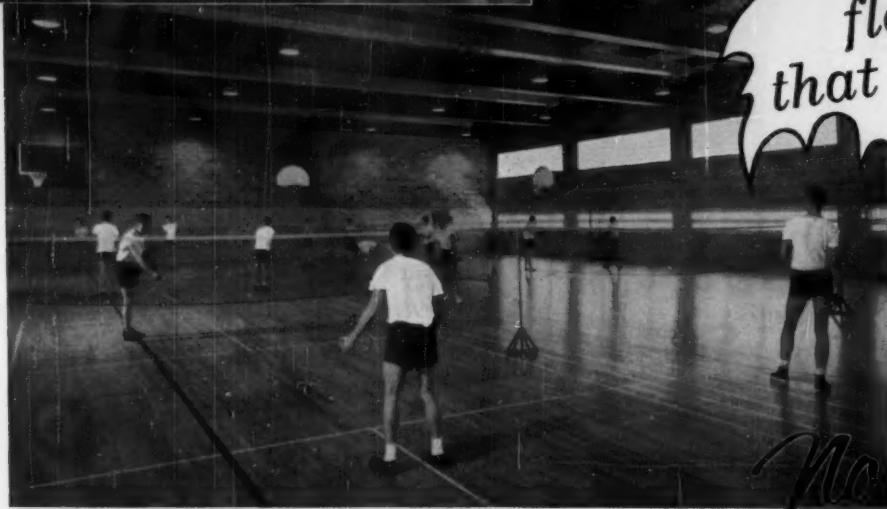


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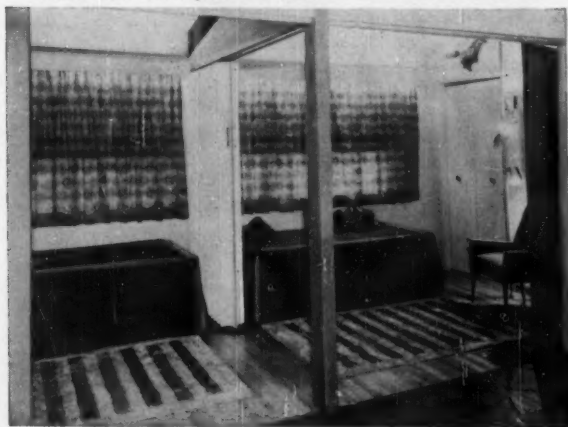
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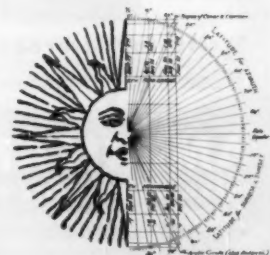
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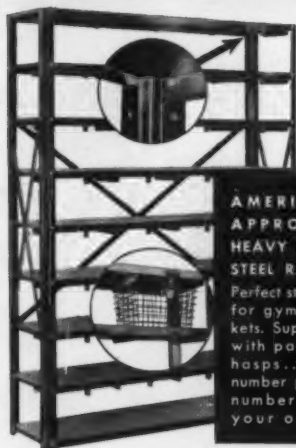
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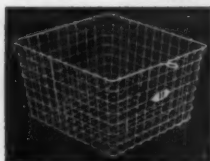


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N. S. B. A. REPORT

Turnabout: Boards "Salute" Boy Scouts in Golden Jubilee Year

MAXINE PINSON
Editor, NSBA Publications

In a co-operative turnabout, the National School Boards Association has done a good turn for the organization that has fostered the good turn concept since 1910. The NSBA salutes the Boy Scouts for their achievements and congratulates them on their record of growth and contribution during the past 50 years. More than that, the NSBA has implemented its tribute to scouting by an active program of co-operation.

At the recent NSBA National Convention in Chicago, the Boy Scouts of America were given a significant role in the convention program. This afforded the Scouts an opportunity to emphasize the values of their movement and to seek further co-operation from groups that are interested in the total education of youth.

Teamwork Booklet Presented

On Monday, April 25, a special convention breakfast meeting, planned in co-operation with Boy Scouts of America was held to explore the theme: "School Boards and Scouting Co-operation." Ninety-one persons attended. They included school board members, administrators, and school business officials who serve as Boy Scout leaders. These are people who not only believe in the principles fostered by the scouting movement, but who are in a position to act upon their belief.

At this breakfast meeting, Harry K. Eby, Director of School Relationships, Boy Scouts of America, presented the new folder, *Teamwork Between School Boards and the Boy Scouts of America*, published jointly by the NSBA, the Association of School Business Officials, and the Boy Scouts of America.

Ways and means of further dis-

tributing this folder to get it into the hands of people where it will do the most good were considered. Mrs. C. Wheeler Detjen, chairman of High School Service of the National Congress of Parents and Teachers; Dr. Taylor T. Hicks, member of the board of education of Prescott, Arizona, and past president of the NSBA; Dr. Harold V. Webb, NSBA Associate Executive Director for Field Services; and Robert E. Willis, immediate past president of the NSBA, participated in a discussion of the values of school board—Boy Scout co-operation.

Viewpoint of Boards

School board members are acutely aware of the power exerted on youth by educative forces beyond the classroom. Those forces can be good or bad. Boards support and encourage the Boy Scout program as one of the really effective character-training forces of our society. W. A. Shannon, NSBA Executive Director, states the NSBA viewpoint in the new *Teamwork* folder:

"Education begins in the home of each child. The American public school is operated to further the education of each individual who attends. There are many institutions and agencies that have specific responsibilities for the development of law-abiding, mentally awake, morally straight citizens. Among these is Boy Scouts. School boards have an unusual opportunity to serve as the catalytic agent in local communities for wholesome citizenship development by adopting policies making school buildings and facilities available to the Boy Scouts and their leaders. As educational statesmen, school board members will provide this leadership."

Problem Areas

The primary purpose of the new booklet is to increase local understanding and co-operation between the NSBA, the ASBO, and the Boy Scouts of America, with particular emphasis on areas where Scout groups are not now permitted to use public school buildings. In relation to this problem, the folder quotes a prominent citizen who has been active in school matters for many years: "The school board, in co-operation with the PTA and other responsible groups, should not merely *permit* but should actively encourage and stimulate the use of school facilities for voluntary character-building activities such as scouting. Any board that really believes such activities to be important can usually find or obtain the funds needed to put such a policy into effect."

Endorsement by Educational Leaders

The folder also carries endorsements of scouting as an important factor in a boy's educational experience by Dr. Taylor T. Hicks, former president of the NSBA; by Dr. Herold C. Hunt, Eliot Professor of Education at Harvard; and by Dr. William G. Carr, Executive Secretary of the NEA of the United States.

The booklet presents a strong statement of support of scouting by Dr. Finis Engleman, Executive Secretary of the AASA: "While serving as principal, superintendent, college president, and state commissioner of education, I gave active support to the Boy Scouts of America because I believed that organization to be a vital force for good among the youth of the nation. *The program of the Boy Scouts of America is worthy of the full support of boards and superintendents of schools everywhere.*" (Italics added.)

Five Million Strong

There are, in America today, five million Scouts and leaders. Since 1910, when the Boy Scouts of America was started, 33,500,000 Americans have been identified with the movement. Among America's great leaders, Scouts have always had warm and helpful friends.

Each president of the United States, since Taft in 1910, has taken an active part in the work of the movement. Two presidents, Franklin D. Roosevelt and Dwight D. Eisenhower, were both active in scouting before they entered the White House.

NSBA in Good Company

The National School Boards Association is in excellent company when it joins the roster of leading individuals and groups who have aided the scouting movement. Taking to heart the dictum—"actions speak louder than words"—the NSBA has already distributed five thousand copies of the new booklet to board members and other education officials throughout the nation.

Any board member or interested individual who would like to receive a copy of *Teamwork Between School Boards and the Boy Scouts of America* may write to the National School Boards Association, 1940 Sheridan Road, Evanston, Ill.

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New Safway telescoping gym seat installation at Menomonee Falls High School, Menomonee Falls, Wis.; architects—Kloppenburg & Kloppenburg, Milwaukee. Seating set-up shown is duplicated on the opposite side of the gym (total capacity 2,370).

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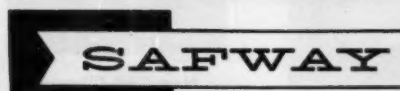
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SURVEYING THE SCHOOL SCENE

SCHOOL BILL BLOCKED

A reported compromise of the school construction bills, as passed by the House (\$1.3 billion, four-year plan with an anti-segregation provision) and by the Senate (\$1.8, two-year plan with a teachers' salary use provision), which would eliminate controversial provisions and meet the requests of the Administration faces severe opposition, according to latest reports.

House Republican leaders are maneuvering to kill any bill by excluding representatives favoring such legislation from a committee scheduled to meet with senate representatives.

SCHOOL COSTS RISE

The U. S. Office of Education reported that \$12 billion was spent to support the nation's public schools in the 1957-58 school year, a fivefold increase since the 1937-38 total of \$2.2 billion.

These estimated figures appear in a fourth study of public school financing by the Office of Education, entitled "Public School Financing Programs of the United States, 1957-58."

The report said that \$7 billion came from local taxpayers, largely through property taxes, about \$4.5 billion from state legislatures and \$452 million from the Federal Government. It said that there had been a substantial change in the pattern of public school support in the past 20 years. In 1937, local taxpayers contributed 69 per cent of support, while in 1957, they contributed 55 per cent. State appropriations during the same time went from 29 per cent to 41 per cent, and federal support from 1 per cent to 4 per cent.

INCREASE IN BIRTHS REPORTED IN '59

The nation's estimated vital statistics for 1959 were released yesterday and they forecast no relief for the school builders.

The number of births went up again, to 4,249,000, after a small drop in 1958 from the record 4,254,000.

The figures, provided by the National Office of Vital Statistics, indicate that the number of school age children will be 10 per cent greater in 1965 than they are now and 1½ times more than in 1950.

The increase is more significant because it follows a year of decreased marriages. The mounting baby crop, the statisticians said, seems this year to be made up principally of second and later children.

"ACCORDIAN PLAN"

A grant of \$100,000 to the Weston, Mass., schools from the Fund for the Advancement of Education of New York City, in partial support of the introduction of certain phases of the "Accordian Plan" has been announced by Supt. Anthony Brackett.

The grant which covers a two-year period from July, 1960, to July, 1962, was made for the purpose of improving the quality of learning and to broaden the base of opportunity for better learning of all students.

The Accordian Plan, the result of the work of a special study committee on the educational program of the new Weston high school, has created considerable interest in educational circles. Phases of the plan, to be inaugurated as a result of the

(Concluded on page 33)

On Better Board-Superintendent Relations

School board literature is most aptly described as lore; it consists principally of ad hoc testimonials, hortative pronouncements, ideological canons, and intuitive analyses. Unfortunately, school board research is little better; normally, demographic and attitudinal data about school board members are collected and the statistical test of significance currently in vogue is dutifully applied. What principles about boards of education have we established by these methods?

A few simple generalizations are known; for example, school board members are more likely to be 50 years of age than 30. Whatever the cause, it is obvious that refined propositions of a predictive nature are extremely rare. How influential is the superintendent of schools in his role of policy adviser to the board of education? Does the type of school board affect the mechanics of board operation?

Inquiries of this nature need to be raised. Accordingly, the Midwest Administration Center of the University of Chicago chose to seek preliminary answers to these questions by carefully studying the administrative procedures used by boards of education in a number of heterogeneous communities.¹ Board members were in-

terviewed and subjected to a number of critical questions: If you have difficulty in reaching agreement on issues, how are these differences ironed out? Are there any "hot" issues you would be reluctant to bring up before the board? If so, can you explain why?

Three Types of Boards

Of one fundamental fact there is no longer any doubt; boards of education can be categorized and they tend to fall into patterns of behavior which permit ready classification and analysis. Three general types predominate: rational, factional, and dominated.

The rational board is composed of individuals who resemble each other both socially and occupationally. The members find association with each other mutually satisfying; problems are solved by deliberation; and disagreements are mediated by endless discussion, ultimately terminating in group acceptance of the result. Devotion to the common cause is taken for granted.

By contrast, *the factional board* is a collection of cliques vying with each other for control of the decision-making apparatus. Members are likely to be socially incompatible; in fact, they may intensely dislike each other. Complex issues are resolved by the power of majority vote, and the coalition which can muster the necessary number of votes pre-

Three keys to improved board-superintendent relations: (1) the board must define in detail the duties of its chief executive; (2) board meetings should focus on defining the purposes of the school system and evaluating how well these purposes are met; and (3) the board should realize that the superintendent is an administrator, not a "goal-setter"

DONALD J. McCARTY

Associate Professor of Education
Cornell University, Ithaca, N. Y.

¹For a description of the research design, see Donald J. McCarty, "School Board Membership: Why Do Citizens Serve?" *The Administrator's Notebook*, Midwest Administration Center, The University of Chicago, Sept., 1959.

vails. The factions arise from several sources: religious and ethnic differences; rural-urban conflicts; labor-management ideologies; social class cleavages; and the like.

The *dominated board* displays a clear hierarchy of superordinate-subordinate relationships. One member either by sheer intelligence, economic power, or social status controls the board; the other members defer to his superior judgment. It does not necessarily follow that poor decisions are promulgated; rather, the quality of direction will depend upon the capabilities of the superordinate.

On the other hand, the domination may come from the superintendent of schools himself; this is the historic way in which schools have been operated. The superintendent compiles a long and complicated agenda; equips himself with seemingly unimpeachable data; judiciously uses the "velvet glove" approach, and unerringly steers the board into accepting his point of view.

Now it happened that each school board agreed on the single most perplexing question which it faced: A definition or clarification of the subjects which should be handled by the school board as distinguished from those which are rightfully the province of the school administration. The line of demarcation seems to get hazy in curriculum; student social, athletic, and discipline problems; faculty and administrative organization; and even such items as recruitment of teachers.

Three Roles of Superintendent

The existence of this "twilight zone of responsibility" forces each type of board to invent its own special technique for defining the role of the chief school administrator. The rational board expects a statesman, a man with ideas who can suggest appropriate goals and at the same time implement them. In fact, it would not tolerate a figure who concerned himself solely with the technical aspects of his position. Though the leadership potential is greater under these conditions, it is equally obvious that the possibility of failure is increased as well. The superintendent is cast as a professional advisor, and if he cannot sustain this demand, he will be released or reduced to impotency.

The factional board views the administrator in a different light: He is primarily a politician, the individual who treads warily among conflicting forces in the attempt to find a compromise position. Such an administrator could never be certain what his board might do at any par-

ticular moment; hence, manipulation of the schisms becomes his basis for action.

The dominated board simplifies the functions of the administrator: He is principally a servant who carries out what the dominant member believes to be proper. He does not have the institutional authority to sway opinion, except perhaps on minor matters, hence he performs much like a functionary would in any type of enterprise.

Three Problem Solving Techniques

The following quotations abstracted from interview protocols illustrate how each board type solved difficult problems:

(Rational Board) "We have long board meetings and if a difference of opinion develops the matter is discussed at length. Before the discussion ends a formula is found that has a clear majority and then everyone votes for it."

(Factional Board) "Disagreements are never ironed out. Many times it comes down to a vote and by a majority, that's it. You can follow your convictions that way."

(Dominated Board) "The chairman would sway the group and bring them around to what he thought was proper procedure."

The following table delimits these relationships in more graphic form; it demonstrates that the role of the administrator is defined by boards of education in markedly different fashion.

Type of Board	Composition of Board	Typical Method of Solving Problems	Role of the Superintendent
Rational	Peers	Group consensus	Professional adviser
Factional	Cliques	Majority vote	Manipulator
Dominated	Leader and followers	Leader decision	Servant

One other matter needs to be stressed. A board of education is a plural executive; it is the policy-making body in the school situation. Administrative theory is clear on this point: The board does not advise the superintendent of schools; he advises them. Still, clarification of the exact dimensions of authority has to be hammered out locally. Our next question: Is board time well spent? If not, is the remedy a reorganization of relationships between the board and its executive officer?

Admittedly, it is hard to get re-

liable data on the matters which occupy the time of board meetings; the most available information comes from board agendas. Typically, agenda items do not give precedence to the tasks which board members consider important. Such a turn of events is likely caused by insecurities on the part of the school administrator whether he be advisor, manipulator, or servant. Indeed, in the welter of complex developments of the post-war period, it is no wonder that board meetings have increased in length if not in substance.

Three Improvements

What then are the ingredients for improved superintendent-board relationships? They appear to be threefold:

1. The first essential is for each board of education to define in detail the duties of its chief executive; if possible, a written job description is preferred. As long as some doubt exists between the two parties as to function, maximum productivity is an unrealistic expectation. Much ineptness in school administration is caused by a lack of firmness in organizational structure; an exalted mission does not entitle education to ignore what is known about administrative principles.

2. In the second place, board meetings should focus on defining or redefining the purposes of the school system and evaluating how well these purposes are being met. In other words, the ends rather than the means should be considered more frequently. The momentous question of appropriate goals is disturbing and vexing; yet, it is the most singular justification for the creation of boards of education.

3. Third and finally, it must be recognized that the superintendent of schools is an administrator, not a goal-setter. Even though a professional schoolman may be an educational specialist, he is not legally permitted to generate policy. The division of labor between the board and the superintendent needs to be sharply delineated, precisely because school policy must remain strongly identified with community aspirations.

Regardless of the type of board of education, proposals such as these, persistently employed, should serve to create a better working relationship leading toward greater fulfillment of community educational objectives. In short, our schools will improve only as their administrative procedures are structured for efficient allocation of authority and responsibility. ■

Stop Vandalism with Parent Responsibility Laws

In recent years there has been a disturbing increase in vandalism of school property. In some instances organized teen age gangs have been responsible; in other situations, two or three young boys gang together and repeatedly vandalize schools; also, occasionally, a single elementary school youngster breaks into a building and inflicts tremendous damage. Nearly half of the state legislatures have enacted some type of parent responsibility law within the past five years as one means of stopping this trend.

Study in Fifty States

In December, 1959, letters were

Mr. Colmey is assistant director of operations and **Mr. Valentine** is assistant supervisor of plant security with the Dade County, Fla., schools.

sent to the 50 states requesting copies of existing parent responsibility laws or an answer indicating that no law was available for that state. Forty-seven of the state attorney general offices replied. Twenty-nine sent copies of their parent responsibility law enacted by their state legislature. Eighteen attorney generals replied, indicating that they did not have a law in their states. Of the 18 states not having such a law, several indicated that efforts were being made to obtain this type of law.

A parent responsibility law is one designed to provide for the recovery of civil damages from a parent or guardian due to the malicious or willful destruction of property by minors. Chapter 55, Article 7A, Code of West Virginia, expresses the intent of this type of law very well!

Findings and Declaration of Legislative intent—it is hereby determined and declared as a matter of legislative finding that in the state of West Virginia

A report on one very effective, but rarely used, way to combat the malicious destruction of school property, **parent responsibility laws:** which states have them; how they are used in a typical school system, etc.

**JAMES W. COLMEY and
THOMAS W. VALENTINE**





"The problem of malicious or willful destruction of school property by minors is . . . continuing to increase in the United States."

there are now, and have been, acts of widespread vandalism wilfully and maliciously perpetrated by children under the age of 18 years, the great majority of whom live with a parent or parents; that this vandalism has caused untold loss and damage of property of public agencies, corporations and individuals for which adequate compensation for said victims cannot be realized because of the lack of estate or resources of such children so that judgments against them for their tortious acts would go unsatisfied; that the primary responsibility for the proper training, discipline and upbringing of said children rests with their parent or parents; that there has been a marked and shocking failure on the part of many parents to effect the proper and necessary training, discipline and upbringing of their children; that as a result of this parental negligence, much of said vandalism by said children has occurred, and that because of this failure of parental responsibility, parents of children perpetrating such acts should be liable for the damages to property caused thereby. Therefore, it is the intent of the legislature so to recognize said responsibility of parents for their children's conduct and to impose on said parent or parents for such acts of their children, who live with them and who commit acts of vandalism wilfully and maliciously, liability in accordance with the provisions hereinafter set forth.

Although the parent responsibility laws vary throughout the United States, the Florida statute shown

below is representative of what most state legislatures have enacted in recent years:

Any municipal corporation, county, school district and department of Florida or any person, partnership, corporation or association, or any religious organization whether incorporated or unincorporated, shall be entitled to recover damages in an appropriate action at law in an amount not to exceed three hundred dollars in a court of competent jurisdiction from the parents of any minor under age of eighteen years, living with the parents who shall maliciously or willfully destroy property, real, personal or mixed, belonging to such municipal, corporation, county, school district, or department of the state, or person, partnership, corporation or association, or religious organization. The recovery shall be limited to the actual damages in an amount not to exceed three hundred dollars in addition to taxable court costs. Laws 1956, 2nd sess., C31400 1, 2.

It is significant to note that three fourths of the states having parent responsibility laws have enacted these laws within the past five years. This would indicate an increasing pressure from the citizenry to find a solution to the problem. A minor is defined as a child under age 21 but, over one half of the states having parent responsibility laws hold parents liable for these acts by their children up to the age of 18. Also, it may be

noted that the limit set for recoveries from parents varies from \$100 to an unlimited amount. However, a limit of \$300 is specified in half of these state laws.

Little evidence is available to indicate that school officials have set up procedures to implement these laws. One attorney general specifically stated "there are no reported cases dealing with this provision since it has been in effect."

Application in Dade County

In February, 1958, the Dade County Board of Public Instruction took the first case to court under the Florida statutes. The small claims court awarded \$300 and court costs to the school board from parents whose two sons burned a portable school building where the estimated damage had been \$5,612. The school board attorneys also tested the law by suing each parent for \$300, but the court ruled that only \$300 per family could be collected for each act of vandalism.

Immediately the question was asked by many interested persons "What happened to the boys?" The answer is that the parent responsibility statute is directed toward the children's parents and does not effect action by the juvenile and welfare court whose interest is primarily in the child. In this particular case, the boys were committed to a correction home.

During the Spring of 1958, a procedure for applying the parent responsibility law to all cases involving known child offenders was formulated. This procedure was put into effect on July 1, 1958, and has been carried out continuously since that date.

The procedure is a simple one including a series of report forms and letters. For each malicious act at a school, principals forward a Plant Security Report form to the operations and maintenance departments. The maintenance department repairs any damage and reports costs to the operations department. With the maintenance cost information and the school report, the operations department has valuable statistical information and ready information for handling cases involving known offenders.

When a child is identified as one damaging school property, a form letter is immediately sent to the parent. Experience in Dade County shows that many of the parents contacted in this manner return a check covering the cost of damages. For parents not answering the first letter, a second letter is sent stating that

STATES HAVING "PARENT RESPONSIBILITY LAW"

State	Yr. of Passage	Maximum Liability	Stipulated Age
Alaska	1957	\$500	Up to age 18
Arkansas	1947	100 Fine plus liability	Minor
California	1955	300	Minor
Colorado	1959	300	Up to age 18
Connecticut	1958	250	Minor
Delaware	1958	300	Up to age 18
Florida	1956	300	Up to age 18
Hawaii	1955	Not stated	Unmarried minor
Illinois	Ordinary principles of tort law may find parent liable for malicious act of minor.		
Idaho		300	Up to age 18
Indiana	1957	500	Minor
Kansas	1959	300	Up to age 18
Kentucky	Court may require child to make restitution.		Amount determined by court.
Maine	1959	250	Between ages 7 & 17
Michigan	1953	300	Up to age 18
Montana	1957	300	Up to age 18
Nebraska	1951	Not stated	Minor
New Hampshire	1957	500	Up to age 18
New Jersey	1867	Amount of injury	School law covering damages by pupils
New Mexico	1959	500	Up to age 18
North Dakota	1957	300	Up to age 18
Oklahoma	1957	300	Up to age 18
Oregon	1959	100	Up to age 19
Rhode Island	1956	250	Minor
South Dakota	1957	300	Up to age 18
Tennessee	1957	300	Up to age 18
Vermont	1959	250	Up to age 17
West Virginia		300	Up to age 18
Wisconsin	1957	300	Up to age 18

the case will be referred to the legal department if a check is not received within 10 days. Most parents do not want to become involved with the courts and generally forward their check.

In the 12-month period from July 1, 1958, to July 1, 1959, 185 juveniles were discovered to be offenders in school vandalism and theft cases in Dade County's 180 schools. By the end of the year, restitution payments had been received from 140 parents. The other cases were referred to the legal department and the most flagrant cases were taken to the small claims court. The amount of restitution collected from parents varied from \$5 to \$300. A total of \$1,900 was collected during this school year. The current school year has produced a similarly successful record.

The school administration in Dade County certainly has not eliminated vandalism of school buildings. Only persons looking for a solution of the problem through "rose-colored glasses" would anticipate complete success. Nevertheless, Dade County

has experienced a definite levelling off in vandalism in schools and has increased parents' awareness of their responsibility.

The amount of recovery is not nearly as important as the impact of the "parent responsibility" program on the community. Parents do not take the attitude "children will be children" when they are "hit in the pocket-book." Many parents are genuinely amazed when they realize the actual cost of damage in cases of vandalism.

One attorney general pointed out a common belief that "the principal problem is that those families which permit their children to 'run wild' have no property, at least in any substantial amount. A judgment against such parents is of doubtful value." Dade County's collection record of 75 per cent indicates that there is some basis for questioning the above belief. When collections can be made from three-fourths of the parents, it is certainly sufficient basis for using this method as a means of forceably bringing to the

attention of these parents the seriousness of the problem.

What Is the Answer?

The problem of malicious or willful destruction of school property by minors is apparently continuing to increase in the United States. There are numerous ways to combat the problem, including the correction of the problem at its source in the environment where these children are being raised. Harrassment and defensive measures such as alarms, custodians, and special construction features of buildings have their place in protecting school property. No one corrective measure is the real answer! School officials must meet this problem with all the sources at hand. Apparently, one corrective measure that is going unused in many school systems is the parent responsibility law. Well-intentioned persons and organizations who work toward the passage of a law gain a false sense of security upon its passage. Their efforts have been wasted if the law is not actively applied. ■

for boards and administrators,
a new look at the philosophy, patterns of
behavior, and purposes of modern
supervision . . .

New Dimensions Supervisory

ROY E. DWYER and
WILSON F. WETZLER

Many school persons who work as supervisors perform their tasks with efficiency and understanding of the job to be done. In numerous instances their contributions to the educational program are difficult to measure in terms of their overall worth and value to the total school and community. Thus there are some school board members and administrators who are not fully convinced that supervisors have an important role to play and are somewhat reluctant to give complete support and endorsement of the financial outlay required for supervising purposes. The focus here is upon discussing the supervisory role in such a way that school board members and administrators see more justification for having such persons on the staff. In addition, it is hoped that new dimensions of the supervisory role will stand out that may give a broader perspective even to certain supervisors who may need to see their jobs in a different light. Specifically, this discussion is concerned with these major objectives stated in the following four questions:

1. What may the school board member and the administrator learn about a philosophy that will lead to better understanding of the supervisory role?
2. Should they expect the supervisor to display a particular pattern of behavior?
3. Is there a single purpose of supervision that is rigid and unchanging?

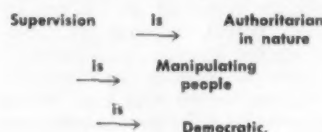
Dr. Dwyer is director of teacher education and Dr. Wetzler is associate professor of elementary education at the University of Tampa, Florida.

4. What may school board members and administrators expect from their supervisory staff in light of *philosophy, role, and purpose*?

A Philosophy of Supervision

It is well known that the function of supervision is primarily to improve the learning of boys and girls. Any school superintendent will receive complete support from his board and the community for the use of supervisors when he can give visible evidence of their worth and value rendered to the school. There are some who feel it is not necessary to define a supervisory program or describe it within a philosophical framework. However, an important practical question keeps reoccurring: Is the supervisor doing something worthwhile and in what ways can this be shown? However, it is believed that when people understand certain basic principles (or a philosophy) there will be greater appreciation of the supervisor and what he is trying to accomplish in the schools.

A philosophy or an understanding of supervision may be described in terms of the following diagram:



There are some supervisors who definitely fit more readily into one of the three categories described above. That is, one person may look at his job in such a way that he is primarily concerned with being the boss: He would rate the teacher or whoever is to be rated; he would fire the weak person and seek an immediate replacement, and so on. In short, he lays down the rules or the pattern to be followed with no argument or fuss. Then, there is the supervisor who conceives his job as a manipulator of persons, conditions, situations or materials. He still has an end to be achieved, as he sees it, but

he knows how to manipulate people or things in such ways that he apparently is not involved. One may be aware of what is happening to him, or he may be totally indifferent to such manipulations; in any event, the supervisor is getting his ends accomplished but he is shrewd enough to keep himself out of the picture. The third type of supervisor approaches his work as one who follows the democratic philosophy. Stating it simply, every supervisory action is predicated upon the thought: What can be done to work *with* this person? The use of the word *democracy* in explaining a philosophy of supervision means exactly what the term implies. The supervisor is interested in helping the person but he is also concerned with *how* he can do his job as a supervisor. Perhaps this is best explained in the following section particularly under the third point.

It should be emphasized that one may think of the diagram illustrating the kinds of philosophy in supervision as being on a continuum. That is, for example, in current practices a supervisor may be classed primarily as an authoritarian. It will be noted later that certain situations will require a different philosophical orientation other than what would normally be one's usual method of operation. The following illustration gives support to this idea that even though one's basic philosophy tends to focus upon a given point on the continuum, such as the authoritarian, generally the philosophy moves along the line in *either direction*:

Mr. Knox is a supervising principal in a rather large school district. His colleagues concede that he is a good administrator and actually works at being a supervisor from the administrative viewpoint. Most persons will agree that he approaches his tasks from the authoritarian point of view. Yet, whenever the problem of scheduling within the individual school building is concerned, he is scrupulously careful to give complete freedom and the final say to

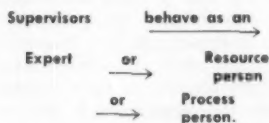
for the Role

his principals. Strangely he reverts to the near-authoritarian philosophy in other areas that are equally as individual a matter as scheduling.

It should be clear that the philosophy and behavior of the supervisor are closely related, as will now be noted in the following section.

Patterns of Behavior of the Supervisor

Generally speaking, the supervisor may approach his tasks from three points of view, as illustrated in the diagram:



Again, it should be thought of as a continuum: the moving from the role of the expert to process person, or from process person back to the expert role may be largely a matter of *how* the person conceives his job or what the situation may demand, or both. That is, some people look upon themselves as being an expert in terms of knowledge or skills, and therefore, supervision becomes a matter of helping people to reach a higher level of performance—or being more like the expert himself. Then again the supervisor considers his role more like that of a resource person. Certainly he may also be an expert in the same sense of the word, but the approach is geared mainly to the idea of giving assistance to the individual. Finally, the process person incorporates the approaches of both expert and resource person by assuming that the individual or the group has power and knowledge to (1) define their problems; (2) to devise means for their solution; (3) to implement the necessary action; and (4) to evaluate their own progress. The expert and the resource person will actually be responsible supervisors by "going through" these four steps with one major difference:

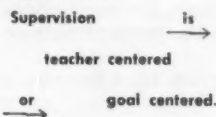
the supervisor personally develops the problem, devises means for solutions, implements necessary action, and evaluates the person's or group's progress.

Thus, it is seen that the process person is commonly thought of as the ideal type of a supervisor. However, it is re-emphasized that certain conditions will call for a role of the expert, with the ultimate goal, probably that of helping people to desire the services of the process person. This is not to say that experts and resource persons play a less desirable role. Actually, the supervisor makes a contribution no matter how he patterns his behavior, from that of the experts to the process person, as long as he recognizes what kind of behavior seems best for the situation.

The Purpose of Supervision

School board members and administrators may have varied ideas as to the real purposes served through the different offices of supervisors. It is hoped that they do not view supervisory practices in the narrow view that there is something wrong with teachers, who are then to be improved through lectures or carefully arranged teacher institutes.

There is some justification for this kind of orientation toward supervision, but a more realistic and modern trend defines supervision in terms of *goal centered* purposes of the teacher. That is, a more humanistic view of the teacher is considered in supervision by recognizing the teacher as a person of intrinsic worth who is capable of helping himself. They are not to listen to lectures nor attend special institutes unless these activities really fit in with *their* goals set by themselves. The solutions to their problems means primarily the reaching of their goals. Thus, the supervisor sees as his major purpose the giving of assistance to teachers. The following diagram illustrates the purpose of supervision:



If the purpose of supervision is largely teacher-centered instead of attempting to get the teacher to set up his own goals, it is clear that some help may still be given. However, the focus should be upon goal-centered supervision if teachers are to feel that the supervisor is helping them to realize goals that are important to them.

Improving Supervision

The discussion concerning philoso-

phy, patterns of behavior, and purposes of supervision may help school board members and administrators to gain a more realistic picture of the duties of their supervisory staff. In summarizing some pertinent points the following suggestions are offered that may serve to furnish additional insights concerning supervision. It is hoped that these points will be practical and useful to the supervisor as well:

1. Supervisors need to play varied roles as required by the situation.

2. In all three aspects, as shown in the three diagrams, the ideal approach is to consider the extreme right position as most desirable. That is, in most situations the supervisor should work within the framework of the democratic philosophy, strive to be the process person, and consider the goal-centered approach primarily.

3. It is good to keep in mind that some supervisors tend to fall into a pattern of behavior that is characteristic and typical for them. To say it differently, the situation, for example, may require a supervisory approach from the expert's point of view, but the supervisor is essentially a process-person. There may be a tendency to be rigid or an unwillingness to adopt a different approach to supervision even for a particular occasion.

4. The person being supervised should be helped to see that there are different roles to be played by the supervisor. Up to this point the emphasis has been upon the person doing the supervising and who may need to grow in his thinking and practices. By the same token teachers should move along the continuum lines in the areas of philosophy, behavior, and purposes of supervision as illustrated here. By moving along the lines to the right it means that they too are growing in the sense of being concerned with democratic processes, being able to work through their problems in a defined, systematic fashion, and feeling concerned with real, objective problems that they have actually defined.

The supervisor plays an important part in the improvement of classroom instruction. When school board members and administrators recognize the flexibility of the supervisor's role because of varied situations, they are better prepared to understand the differences in their behavior. Both supervisors and teachers particularly need to appreciate the importance of growing in their ability to function within the democratic framework, to feel capable of tackling real problems, and to see that basically goal-centered problems are, after all, the worthwhile issues that need answers. This new look at supervisory behavior requires administrative interpretation and leadership from school board members, administrators, supervisors, and the total staff. ■



Two students chat with the conductor and first violinist of a symphony orchestra that performed in Des Moines.

Des Moines Symphony Concert Adds an Educational Dimension

ROBERT R. DENNY

Administrative Assistant to the Superintendent
Des Moines, Iowa, Schools

For the 24th consecutive year, more than 4000 Des Moines school children attended a symphony concert. The complete program of the Dallas Symphony Orchestra was heard in KRNT Radio Theatre, the world's largest legitimate theater. These symphony programs are now an established tradition in the Des Moines Schools. Students in the 72 buildings across Des Moines do background work for six to eight weeks prior to the program.

Work Begins One Year in Advance

About a year in advance of each concert, Lorrain Watters, Director of Music Education, and a committee of classroom teachers select the pieces to be played. The next step is to work out aids and devices for the classroom teacher to use with students. One of the first things Mr. Watters does is to do research in his music library and make up program notes. In addition, he includes sources of materials for teachers to use with their groups.

Themes are lithoprinted and sent out. These themes are available in several different forms. There may be simple arrangements so young pianists may play them. Excerpts for school bands and orchestras may be provided.

Weekly half-hour broadcasts over the school radio station, KDPS-FM, carry the music into each school. These

broadcasts allow the students to hear all of the themes with a running commentary by either the director of music education or one of the music consultants. Since September, 1959, the Des Moines school's television station KDPS-TV has been used for classroom instruction prior to the concert. The telecasts provide an opportunity to present visual shots of the guest symphony orchestra, and the conductor, too. There is an opportunity to use pictures of the composers as well as picture-story material of their lives and times.

Classroom Teaching Goals

Mr. Watters reported that there are certain goals for every classroom instructor. He enumerated these briefly as:

1. Teaching for a humming familiarity with themes.
2. Pupil recognition of instruments in orchestra by sight and sound.
3. Pupils become familiar with composers as men. Pupils learn about their backgrounds, countries, time in history.
4. Pupils learn the form of music. This means the different kinds of pieces, i.e., overture, waltz, symphony.
5. Pupils get the general feeling of a piece of music — what it tells them — a feeling for our heritage in music. They get an understanding and appreciation of our vast legacy of fine music.

Seating Plans and Transportation

About four weeks before the concert, seating plans for the 4139 seats in the theater are completed. Tickets are allotted to each school. Seating diagrams are mimeographed and sent to each music teacher. Since there are no ushers, it is imperative that each school group must be able to go directly to its assigned space in this vast theater. Accompanying the 4000 students are 139 teachers and principals. Two nurses are stationed at strategic points.

Approximately three weeks in advance of the concert, final plans are made for transporting pupils from the 75 square miles included in the school district to the KRNT Theatre. Ten school buses transport students from outlying buildings that do not have access to public transportation. Most of the 4139 concert-goers come via public transportation. Arrangements are made in advance for dozens of special traffic policemen to be on duty so that the 4139 students and adults can enter the auditorium without waiting for automobile traffic.

Cost of Symphony

Each pupil pays 35 cents admission to the concert. Mr. Watters explained that the low cost of pupil admission is possible only because the professional orchestra is brought to Des Moines by the local Civic Music Association for an evening performance for their membership. Since the orchestra is in the city, a day-time concert for young people can be arranged for a small additional fee. In the case of the fall concerts of the local Des Moines Symphony Orchestra, the pupil admission is 25 cents.

History of the Concerts

The first children's concert sponsored by the Des Moines Public Schools was held in 1936. Interest increased so that in 1947 a second concert was added. The fall concert is even bigger than the one in the spring. On this occasion, 4139 Des Moines school children hear a concert in the morning. In the afternoon, 3000 parochial and Polk County school students hear the same concert. Thus the concert programs are becoming regional in scope.

With the advent of local Civic Music groups in cities and towns all across America, many school systems have similar opportunities. Such co-operative programming involves not only local school administrators, school boards, and civic music associations but also the visiting musical groups. Usually student admissions will pay the added costs of a second performance without cost to the school district. With a little forethought and planning, public and parochial students can enjoy a wholesome and cultural music experience. ■

How the Westfield, N. J., schools
developed a sound staff appraisal program
to upgrade the level of instruction

A Sound Staff Evaluation Program

ROBERT I. SPERBER

Former Administrative Assistant to the Superintendent
Westfield, N. J., Schools

Boards of education, in increasing numbers, feel that the best way to raise the level of the instructional program is to reward those teachers doing a superior teaching job with merit pay.

The adoption of merit pay programs in the United States would be greatly speeded if complete assurances could be given that the criteria developed to distinguish superior teachers from good teachers are valid, that superior teachers prefer to be recognized and rewarded as master teachers, and that parents would not create problems by demanding that their children be educated only by master teachers.

Because these complete assurances regarding merit pay programs cannot now be given, it becomes necessary to improve the instructional program by other means. To meet this challenge, some school districts have developed staff evaluation or appraisal programs based on sound counseling techniques used by administrators.

In the Westfield, N. J., public

school system, a sound staff evaluation program has been developed over the past 11 years under the direction of school superintendent, Dr. S. N. Ewan, Jr., and his administrative staff.

Westfield's administrators believe that evaluating or appraising the performance of staff members constitutes one of their basic functions and that it is necessary for the successful operation of the school system.

They hold to this belief for many reasons. First, they believe that through the staff appraisal program, they are helping the employee to develop insights into the nature and scope of his job, leading to greater *self-understanding*. Second, they believe that appraising performance results in the employee's *growth* in the job. Third, they believe that the staff evaluation or appraisal program offers the appraiser and the appraisee a *two-way opportunity* for the discussion of all professional problems. Fourth, they believe the staff appraisal program offers appraiser and

appraisee an opportunity for establishing good *interpersonal relationships* and promotes "*the professional team*" feeling. Fifth, Westfield's administrators believe that the program offers an opportunity to increase the *mutual understanding of the needs, goals, and personalities* of the appraiser and appraisee.

The Westfield staff appraisal program is conducted with all employees, including nonteaching personnel. Formal evaluation of performance occurs at least once yearly, or more often, if the evaluating administrator finds it more desirable for greater efficiency.

The evaluation or appraisal program involves three distinct and important stages: (A) preappraisal; (B) appraisal or conference session; and (C) continual follow-up.

A. Preappraisal Stage

1. The initial aspect of the preappraisal stage is the selection and orientation of new employees which serves to set standards of performance. Orientation involves a carefully planned program in the fall and opportunities the previous spring and summer for newly hired employees to observe and gather needed materials. In the case of employees joining the school system after the beginning of the academic year, opportunities are afforded for observation prior to taking over a position.

2. The second aspect of the preappraisal stage involves continuous observation¹ of the employees' on-the-job performance with consideration of such factors as: (a) personal characteristics, (b) planning and preparation, (c) methods of instruction or work, (d) observable results in pupils (e) relationship with others, and (f) attitude toward teaching or work.

3. Each observation of on-the-job performance is followed up with a post-observation conference.

4. Planning for the yearly appraisal session with the staff member is the core of the preappraisal stage. The appraiser reviews for himself the results of the post-observation conferences; reviews employee record folders; consults with supervisors or department heads; re-examines lesson plans and/or work schedules; reviews appraisee-pupil relationships; reviews appraisee-co-worker relationships; reviews appraisee-parent relationships; and reviews appraisee-community relationship.

B. Appraisal or Conference Session

Having collected and reviewed his

¹A minimum of three one-half hour observations is recommended.

data, the administrator is now ready for the annual appraisal or conference session, the heart of the evaluation program. (It should be noted that post observation conferences and conferences held for on-the-spot problems are also forms of appraisal sessions, but are not included in the description that follows.)

1. The appraisal session is scheduled at a mutually convenient time.

2. The appraiser sets an informal, friendly climate for the general appraisal session.

3. In this climate, the appraiser develops the appraisee's desire to evaluate his own performance.

4. From this self-evaluation, patterns are traced to indicate the appraisee's areas of strength, growth, and possible improvement.

5. An attempt is made to arrive at a common agreement as to the steps needed to make improvement by providing for a free exchange of ideas. If it is impossible to arrive at common agreement, the recommendations of the appraiser are understood to be the guide for future action.

6. All important points developed in the appraisal session are summarized and a summary of appraisal remarks are sent to the superintendent's office.

C. Continual Follow-Up

The continual follow-up procedure is for the purpose of determining how effectively the appraisal session allowed for *growth*. All techniques introduced in the pre-appraisal and appraisal stages are used in the continual follow-up stage.

Are we satisfied with the staff evaluation program in Westfield? Our administrators would undoubtedly say that no program involving staff evaluation is so perfect that it cannot be improved.

Planned contact with educators from the universities enables us to continually increase our knowledge of what is involved in good instructional programs and techniques. This helps us when we appraise on-the-job performance.

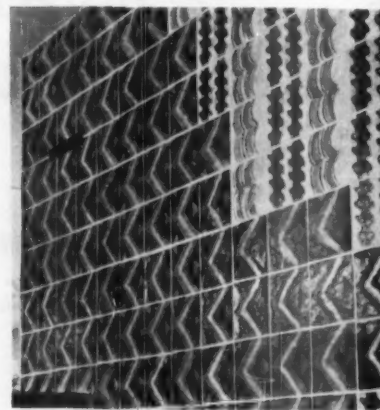
At present the administration is considering establishing a continuous in-service program for all personnel involved in evaluating staff performance. This in-service training program would involve experts to help us further perfect our counseling techniques.

What does the staff think of the evaluation program? All indications point to an enthusiastic response on their part to a program designed to raise the level of instruction without merit salary considerations. ■



These scenes were designed and created by children of The Kamehameha Schools in Honolulu, Hawaii. Above, Chief Kamehameha left, fends off spears of other warriors.

Students Create Designs in Ceramic Tile



This wall is of 6 and 12-inch tiles, representing a formalized tapa design. Harold W. Kent is president of the Kamehameha Schools.

This scene depicts the legend of the "Mamalahoe" which expresses the right of people to walk safely on pedestrian highways.

Photographs were taken by the Kamehameha Schools photography department.



An alternate public-private
school plan for

Meeting Educational Revenue Requirements in the Decade Ahead

EDWARD F. RENSHAW

Department of Economics
University of Chicago

"The belief in the inevitable superiority of American education was shattered when the Soviets sent a small metal globe into orbit. This brought home, more effectively and more painfully than scholarly reports, that Russian-educated scientists can successfully challenge the products of our own educational institutions. That it ended the era of complacency about American schools was shown in a public opinion poll by *Life* magazine, early in 1958, in which two-thirds of U. S. college graduates rated Russian mathematics-science high school training superior to that in the United States. It is now self-evident that a major improvement in the quality of our educational product has become a matter of national survival. As one educator remarked: 'The man who has done most for American education in 1957 may well have been Nikita Krushchev.'"¹

Even the most conservative estimates of school needs in the decade ahead suggest that we will continue to face a problem of diverting an increasing proportion of national income into elementary and secondary education. According to Roger Freeman:

A straight projection of past trends places school revenue needs in 1969-70 between \$21.4 and \$23.5 billion dollars. If national income rises at an annual rate of 3 per cent, taxes of the same severity as existed in 1955-56 will produce \$14.6 billion in

school revenues. Thus, additional taxes totalling \$6.8 to \$8.9 billion, or between 1.3 and 1.8 per cent of the national income will need to be imposed to meet school revenue requirements in 1969-70, if present trends continue.

School revenues in 1955-56 equalled 2.9 per cent of the national income; an increase to between 4.2 and 4.7 per cent will raise the school tax burden by 40 to 60 per cent, regardless of the type of tax—property, sales, excise, or income—or the type of government that levies it.²

Sources of Revenue

The committee for the White House Conference on Education, several committees of the National Education Association, and the individuals who drafted the "Rockefeller Report on Education" have recommended that school funds be doubled within the next decade. While the problem of obtaining additional funds may, in many cases, be of secondary importance to controversial issues relating to how monies are spent, it is doubtful that any other issue will attract more attention or be the subject of greater debate. It is reasonable to expect that politicians, national organizations, and citizens alike will be seeking new or improved ways of increasing the revenue available for school purposes. This paper will be concerned with one possibility or alternative which is likely to be overlooked in the mad scramble for additional funds.

In addition to the more conventional

sources of school revenue such as the property tax, the sales tax, and the income tax, there exists another source of potential revenue that has not been fully exploited. It is the amount of money, in addition to taxes, that parents would be willing to pay in order that their children might obtain a better education. One can infer from the behavior and concern expressed by parents that this source of revenue is large.

One of the most interesting developments in American education is the recent shift from public to nonpublic schools at the elementary and secondary levels. Between 1940 and 1956, enrollment in nonpublic schools grew four times as fast as enrollment in public schools. Twenty-nine per cent of the additional children who sought admittance to school in this period chose nonpublic schools.³ The shift is indeed remarkable when one stops to consider that a much greater share of the cost of staffing, constructing, and financing is borne by parents who send their children to private and parochial schools than those who send their children to tax-supported schools. It has been estimated that the trend toward nonpublic schools saved the taxpayer \$1.8 billion in 1955-56.⁴ Current school expenditures by public schools in 1955 and 1956 amounted to only \$8.4 billion.⁵

While it is perhaps debatable whether the program of education provided by nonpublic schools is, in fact, superior to that of public schools, it can hardly be denied that a prime motive for the shift is a feeling on the part of some parents that the program provided is, in some important ways, better.⁶

For the satisfaction of thinking that they are sending their children to a superior school, they are willing to pay a price. One could argue in other and, perhaps, less controversial ways that there exists, in addition to a social demand for education, private demands which are not being fully satisfied. Just ask yourself how much you would be willing to pay in order that your children might be better educated. If resources are to be optimally allocated between the public and private sectors of our economy, between consumption and educational investment, thought

¹Op. cit., p. 31.

²Op. cit., p. 234.

³U. S. Office of Education, *Preliminary Statistics of State School Systems, 1955-1956*, Circular No. 508.

⁴See: "Rising Enrollment in the Non-Public Schools," *School Life*, Oct., 1957; Oliver LaFarge, "We Need Private Schools," *The Atlantic Monthly*, Feb., 1954; "Are the Public Schools Doing Their Job?" Yes, Herbert L. Brown, No, John Keats, *The Saturday Evening Post*, Sept. 21, 1957; Will Herberg stated in "Justice for Religious Schools," *America*, Nov. 16, 1957, p. 193: "Actually the most serious threat to the public school is not the private or parochial school, but its own failure in education and religion. Parents are deeply disturbed about why Johnny can't read, or write, or do anything else that used to be regarded as schooling . . .": "This sentiment is contrary to the conviction of public school administrators in general and of many parents. But it probably does express the feeling of the parents who prefer to send their children to non-public schools," Freeman, *op. cit.*, p. 31.

(Continued on page 29)

⁵Roger A. Freeman, *School Needs in the Decade Ahead* (Washington: The Institute for Social Science Research, 1958), p. xix.

Involving the Community in SCHOOL PLANNING



It was election day in the central Texas town of Brownwood. On that day in December, 1957, voters of the Brownwood Independent School District went to the polls to vote on a bond issue totaling \$1,600,000 for a school building program. The results: for the bond issue—891; against the bond issue—1502. It was a sad day for the local public school system.

This same city of 22,000 people had another election on December 12, 1959. This time the building proposals presented to the voters were identical. Due to the rise in cost of construction, however, the total cost of the program came to an estimated \$2 million. The results: for the bond issue—1528; against the bond issue—796.

What caused the property-owning voters to reverse themselves in this two-year period? There had been no significant increase in scholastic population in the district. The need for improved school facilities was great, but little more so than two years earlier. Then, too, virtually the same voters voted in both elections. Only 55 more ballots were cast in 1959 than in 1957. The answer to the question is an obvious one—community involvement in school planning.

Our time is marked by the increasing interest of people in their schools. Perhaps as never before, the citizen is seeking to know more about the educational system in his community. This interest with the resulting community participation in educational planning, is potentially a highly desirable development. This fact was borne out by concrete results in the Brownwood Independent School District.

While this is one case of positive results from community involvement, it is not an example of what happens in every instance. While it has tremendous potential, community action regarding

schools does not always result in a desired outcome. When such action takes the form of factional struggles, the schools are likely to suffer. On the other hand, when community action has direction, purpose, and competent leadership, it might well be one of the greatest assets of school boards and school administrators.

The Advisory Committee

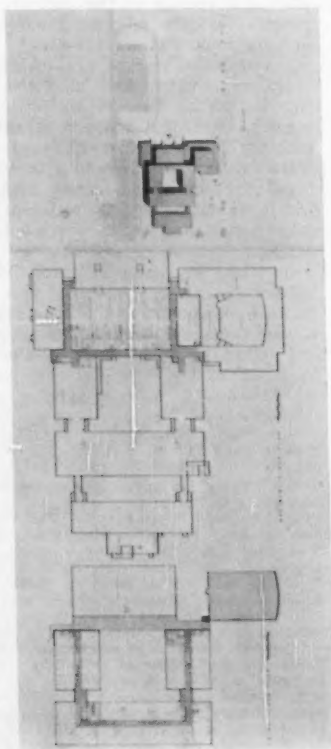
One of the most common and most useful ways of involving the community in school planning is through a "Citizens Advisory Committee." This was the approach used by the board of trustees in Brownwood, Tex., in October, 1958, as it sought ways to alleviate the critical needs of the school program. The board decided to use an advisory committee after it became evident that (1) the community was not fully aware of the desperate need for improved physical facilities; (2) the board did not fully understand the attitudes of the people about school improvement; and (3) the board needed the best advice possible on which to project plans for future building. With these things apparent, the board turned to the citizens for help.

The actual selection of members of the citizens advisory committee and the task it performed proved to be a worthwhile and gratifying experience for the community. At the same time, the board of trustees was able to gain valuable experience in the use of community resources in school planning. This experience promises to pay rich dividends in future progress of the Brownwood public schools.

Principles to Follow

Partly through study, but chiefly by experience, the Brownwood school board learned some valuable lessons in the utilization of community resources.

Confidence in the People: First, a



how the Brownwood, Tex., district used a citizens advisory committee to recover from a defeated school building bond election

JOE B. RUSHING

Administrative Vice-President

Howard Payne College, Brownwood, Tex.

board of school trustees must sincerely believe that citizens have a contribution to make. While the board has always to remember that it is the legal authority of the school district and cannot in any way delegate certain responsibilities, it should recognize that citizens' groups may be able to offer significant help. Having once sought help from its constituency, a board must conscientiously attempt to utilize it.

Selection: In its selection of a citizens advisory committee, the board must exercise considerable care. This is not to say that it pick only certain individuals to serve on such a committee, but the important thing is the manner in which the committee is selected. A committee which is "hand picked" may do more to damage a cause than one chosen by another means. The Brownwood school board solved its problem by turning to another agency for selection of members of its advisory committee. This agency was the Brownwood Parent-Teacher Association. Each of the PTA's in the system was asked to select five members of the citizens advisory committee. The board did not stipulate names of individuals, but specified one qualification—the persons chosen should be interested in public education. When these names were all submitted, the board officially appointed the 45 people as members of the Citizens Advisory Committee on Public School Facilities.

Organization: A third principle to be followed in community planning is that of good organization. This is essential if the committee is to carry out the task assigned to it. It may be done, as in the case of the Brownwood citizens committee, through a system of subcommittees. When the main committee is as large as this one, some workable organization is essential. The Brownwood committee divided itself into sub-

committees in a manner which showed no preference or partiality. The subcommittee assignments were made as members came to the initial meeting by the order in which they arrived. Each was given a folder carrying a letter and a number which gave him his subcommittee assignment. The subcommittees then in turn chose their own chairmen. This constituted the working organization. Each subcommittee had specific functions to perform.

Understanding and Leadership Needed

Understanding its Role: A fourth thing, and perhaps the most important to be observed in the use of citizens advisory committees, is that the committee must fully understand its nature and responsibilities. The board of trustees cannot delegate certain responsibilities. The committee needs to know and accept this fact. It must realize that the board is not obligated to accept and adopt all recommendations. It must fully understand that its role is advisory only, that it has no legislative status, and that it cannot in any way assume the legal responsibility for the operation of the school. With this concept, ad hoc committees are highly desirable and as soon as they have performed their function, should be dissolved.

Leadership: A fifth necessity in community involvement in school planning is strong leadership. The advisory committee must have strong leadership within itself. This leadership cannot be supplied solely by an administrative officer of the school or of the school board. The administration and the board can assist the committee and its work by being careful in initial selection and organization so that capable persons are found for leadership responsibilities. It is axiomatic, and perhaps trite, that a

committee is only as strong as its leadership. The administration of the school can render valuable assistance by providing secretarial help and other routine services needed by such a group. It cannot, however, at the same time provide the leadership and expect to have real community involvement.

Broad Representation: A sixth thing which the school board must remember is that citizens committees should be appointed by the board and they should have broad community representation. When pressure groups appoint their own committees to investigate or to recommend, usually the results are not highly beneficial. The board itself must see the value of community participation and in so doing involve a broad segment of the community. The so-called "Citizens Committees," which form from opposition groups seldom have worthwhile contributions to make.

Timing: A seventh point to observe in citizens advisory committee work is to operate on a schedule. There should be a time schedule established at the beginning of the study so that the reports will be completed on a schedule which will make them worthwhile to the board and to the community. In its final stage of reporting, the meetings should be held open to the public, and while the advisory committee is not to vote to establish policy, it should seek consensus within its own ranks in its final report. Again this goes back to careful planning in the initial stages of the work and strong leadership throughout the existence of the citizens committee.

Other Help Also Needed

Communications: When an advisory committee is serving the schools, other agencies can render valuable assistance. It is recognized that a committee must be of workable size, yet through the press, radio, and television much can be done to stimulate interest and in a sense involve the entire community in the activity. Organized civic groups can give recognition and support. Local businesses should co-operate by encouraging employees to accept places of responsibility on advisory committees. Some may even allow the employees time for this community service. When these things are all utilized in a citizens advisory committee on public schools, then it can truly be said that the community is involved in school planning.

In conclusion it may be added that the organization of an advisory committee may not be the easiest way to do educational planning. It requires time and effort. It may, however, be the surest way of co-operative planning or interpreting plans to the public. Brownwood, Tex., and many other communities across the country have found it to be so. ■



Jefferson

Junior-Senior High School

RAYMOND A. ORPUT
Orput-Orput and Associates
Rockford, Illinois

Jefferson Junior-Senior High School in Rockford, Illinois is a *complete* educational plant, based upon a thoroughly departmental academic program, including vocational education, equivalent to the most outstanding high school system anywhere extant.

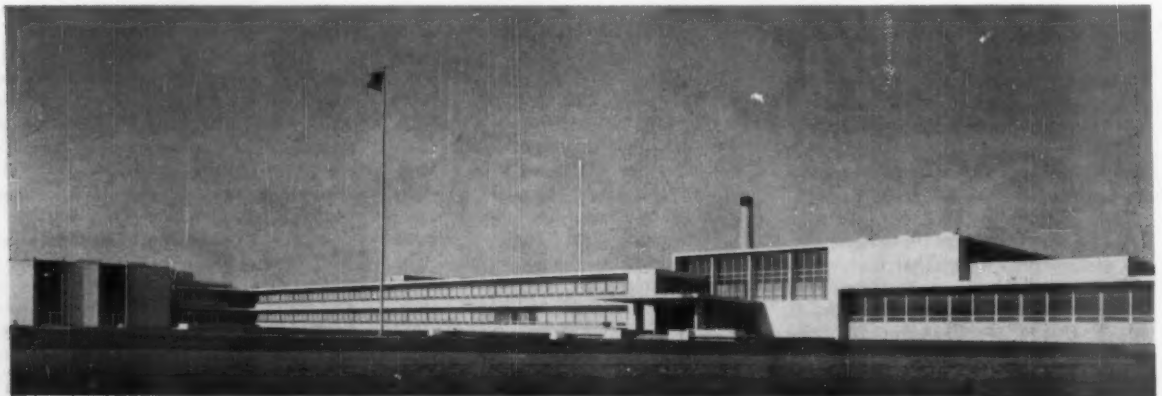
The accelerated education basis of Jefferson School gives a complete academic departmental and vocational arts education to students at the seventh, eighth, ninth and tenth grade levels. It meets the present demands that the advanced educational experience of the students start as early as possible. It

elevates the child from the primitive form of elementary school educational level to a broad academic departmental and vocational arts experience.

"We find that Jefferson School functions better the more we use it," said Principal John Wise. "Imaginative planning has placed facilities where they augment each other. Beauty and quality are so apparent throughout the building that our pupils are proud to maintain it. The tasteful use of ceramic tile, glass, and terrazzo has produced a definitely desirable aesthetic effect conducive to appreciation by young folks. The

full use of the building has shown our facilities to be flexible and adequate in all respects."

Jefferson is a Class "A" building with the two main story areas of reinforced concrete design. It contains the following instructional rooms: Twenty-nine academic classrooms, six general science rooms, four music rooms, three commercial, five industrial arts, four home economics, three art, one gymnasium (with dividing partition and two play areas), one corrective gym (may be divided into two corrective areas), one swimming pool, one library (with an-



Exterior view of Jefferson Junior-Senior High School in Rockford, Illinois. Architects were Orput-Orput and Associates of Rockford. John Wise is principal of Jefferson High School.

nex), an auditorium, a little theatre and a cafeteria.

By special design and use of stadium seating arrangement, balconies in the auditorium were eliminated. Also, three additional rooms were gained by placing heating and ventilating mechanics in the auditorium ceiling space instead of adjacent thereto. "These are complete, full-sized classrooms entirely adequate in all respects," according to Mr. Wise. "The 'attic' of the auditorium is easily accessible and permits free upright movement on railed catwalks to all points over the auditorium. This is important in maintenance of machinery in the frequent changing of colored spotlights necessary for constant use of the stage by pupils and public."

In the general planning of the school, classroom ceiling heights were dropped, making an over-all saving on the entire cubic footage of the building. By using glass for wall separations in the corridors, the cost was \$1.20 per sq. ft, less than any other usable material.

Acoustical treatment was given to the roof deck form boards above the gymnasium trusses, but the actual gymnasium "ceiling" was eliminated. Great savings were made in the structural framework of the swimming pool area by placing the pool at grade level.

The architect has estimated that \$100,000 was saved in the cost of Jefferson by the avoidance of building a special power plant separate from the main building to contain a group of standby boilers, which could only deteriorate from lack of use. An inspection of the integral simplified power plant of Jefferson will reveal the utter simplicity and economy of this design.

The "extras" on Jefferson School were infinitesimal — less than 1%. Formica paneling on the walls was used on a restrained basis, to soften the instructional nature of the building so that when school dances are held, the students feel that they have "gone some place" for a real party and not just "back to school." Doors open out on the school grounds from this room, giving a patio effect when future landscaping plans are brought to fruition.

In the cafeteria area, two serving lines are provided, with a single cashier in the center of the two converging lines. The dishwashing area is placed at the main corridor end of the dining room where dishes can be disposed of without creating cross currents of travel. Mr. Wise stated that "Fourteen hundred and fifty (1450) pupils are handled in three, thirty-minute lunch periods, with complete emptying of the cafeteria between lunches."

A basic thought behind the design of the Physical Education department was the dual use of the locker and shower room areas of the girls' and boys' locker



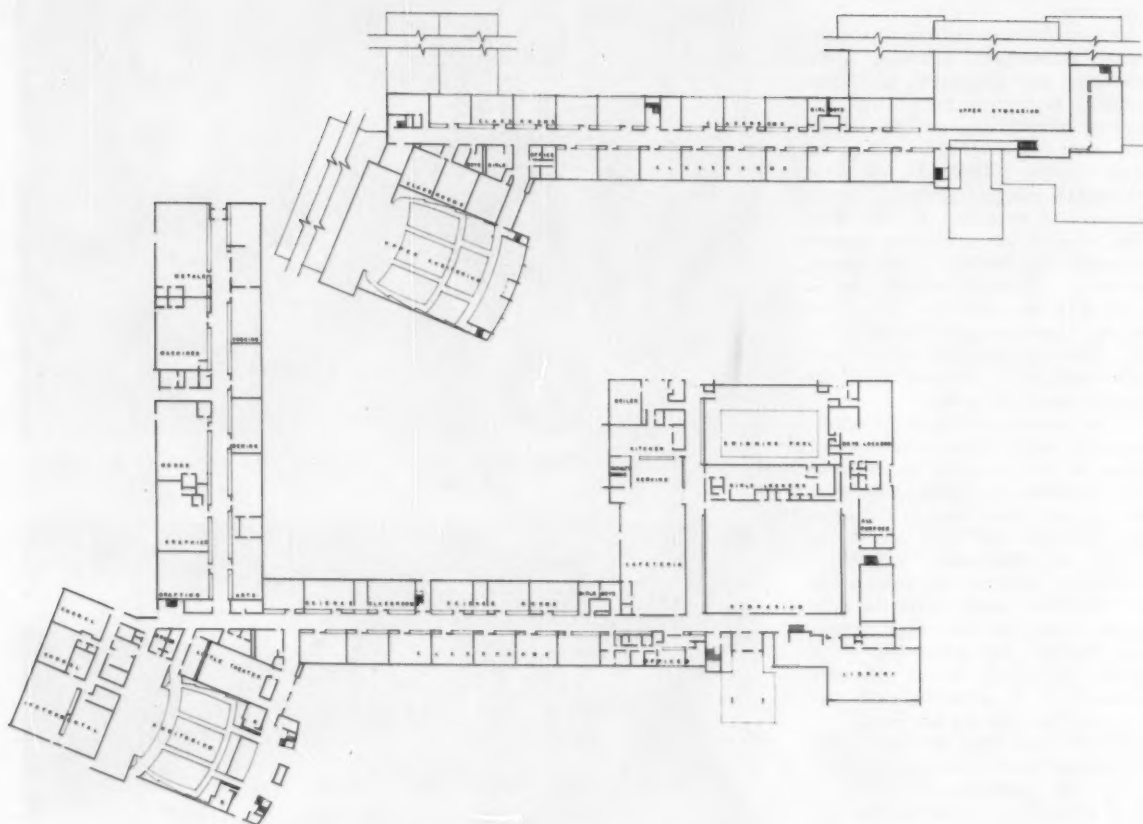
A view of the machine shop. Also in this area are metal, wood, graphic arts and drafting rooms.



A view of the swimming pool, which was designed with direct access to the playground.



A view of the auditorium, with its stadium seating arrangement to eliminate balconies.



rooms, serving the swimming pool and the girls' and boys' gym. The swimming pool was designed with direct access to the playgrounds so that if it is thought desirable in the future, this pool may be used for year-round recreational purposes.

"In summing up this building," said Mr. Wise, "the visitor is invited to consider the arrangement of the departments and the balancing of the areas from a functional standpoint as a school education plant. For example, all vocational class rooms are together. The metal, machine, wood shops, graphic arts, and drafting rooms are all on the south side of the corridor and the two cooking laboratories, two sewing laboratories, living demonstration areas, two art rooms and ceramics laboratory are the north side area. This is important as a feature because both boys and girls are thus grouped together with an opportunity to develop interest in all of these subjects, and not be unwisely divided into what is unrealistically called, masculine and feminine courses. We have tried something which, we believe, is outstanding in the country. An exchange of boys and girls has been carried on during six weeks in each

semester between the industrial arts and the homemaking classes. This has proved most successful."

Orienting around the school's auditorium is the fine arts department. The auditorium is the central area of performance and it is the core of the orchestra rehearsal room, the band room, and the choral and dramatic arts rooms. The Little Theatre is used for dramatic classes, public speaking and visual education, as well as for small ensemble practice for the budding musician. The lugging of heavy band and orchestra instruments to a distant stage is avoided by the fact that the music department is immediately back of the stage. No stairs need be climbed or descended with heavy band instruments to get to a drill ground since doors open directly off the music area out onto the school grounds.

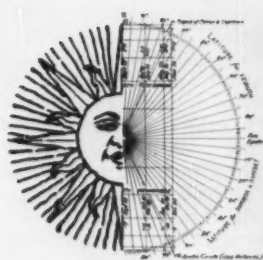
The school's academic area embraces the teaching of such subjects as mathematics, languages, social science, physical science, etc. The rooms are centrally grouped as orienting centers to the vocational, fine arts, library, cafeteria, and physical education centers, with a minimum of steps required for human circulation.

The cafeteria area also contains the kitchen and administrative and power plant facilities for easy operation of the building.

The library is near the general academic area of the building and also serves as a student center. It is removed from the general academic center of the building in order to provide a quiet atmosphere for study. The library annex is a student group center to be used for small meetings of the student body, faculty members and parents. There is also a small lounge center in connection with the cafeteria for use during school dances.

The central entrance feature of this area of the building has been dramatized by a mezzanine floor used as a connecting link to the commercial department and library.

All mechanical equipment in this area has been skilfully housed in enclosures so that an area which otherwise would be ugly and merely utilitarian has been changed into one of the most beautiful parts of the building. The utmost simplicity has been used in developing the natural beauty of this space with the simplest lines possible and at very little cost.



GLASS



— Owens-Illinois

The controversial school building material

The popularity of glass among today's innumerable building products is almost self-evident. So extensively is glass featured that it may well be claimed that the yesterday's classical forms of architecture have been superseded by the "glassical" designs of the contemporary period. Whether this is, aesthetically speaking, for better or for worse is a matter of taste, and time alone will judge whether "glassicism" will ever attain the fame and lasting admiration of classicism architecture.

The emotional reactions to buildings featuring a "glassy" façade range from the "ooh's" and "aah's" of the delighted to the muffled mutterings of the displeased. The perspective of the observer dictates the response.

To some, the all-glass walls mean a lot of windows to wash. Others are disturbed by the difficulty encountered in darkening so many daylight sources when projecting educational films. Still others think about the extra tons of coal or gallons of oil that will be consumed in trying to heat such a structure. Then, of

course, to the boy with an air rifle or a sling shot, the large glass wall is one of life's great temptations.

On the positive side, the observer of the same wall can see it as a wondrous way to escape from the confines of a room. For others, it creates a feeling of oneness with the out-of-doors. Still others enjoy the flood of pleasant daylighting of interior spaces which the all-glass curtain wall makes possible.

Glass Exists in Many Forms

While these subjective reactions are interesting, our objective analysis of the characteristics of glass toward better understanding of the controversy over its use leads us to break, first of all, with the stereotype which views all glass as "just so much window pane."

Among the common forms there is heat-absorbing glass, which admits less solar energy than does ordinary plate glass. There are tinted glasses of various shades which transmit from 12½ to 25 to 45 per cent of light (and also less solar heat) de-

An analysis of the three major problems of our "glassical" schools: daylighting control, solar heat gain, and interior heat loss

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pending upon type and color. There is even a gold-coated glass. This substance has a thin, transparent coating of evaporated gold which serves to reflect the large amount of solar radiation away from the building. When gold-coated glass is combined with heat-absorbing glass, it may reduce the solar heat gain of ordinary materials by as much as 50 per cent while reducing the light transmission by 66 per cent. (As some of you have doubtless surmised already, it would hardly be prudent to use gold coated glass in the construction of school buildings no matter how beneficial the effects of such materials.)

There is multiple-glazed glass, which is known better by such commercial names of "Thermopane" or "Twindow." It can be double or triple glazed and the distance between the glazing can vary from $\frac{1}{4}$ to $\frac{1}{2}$ inch. The insulation value of multiple glazing has been well advertised but its cost less well known.

Glass block is hardly a stranger to anyone who has visited school buildings. Glass block can be of the clear or light-directing variety. A colored plastic diffusing sheet or panel is sometimes placed within the cavity of the block. Recently, colors have been glazed onto such blocks and this has helped to break the monotony of glass block walls.

While ordinary glass shatters easily, this fragility can be corrected through special heat treatment for stress distribution which results in an increase of the tensile strength. Tempered sheet glass is not unusual in school gymnasiums. When ceramic or vitreous enamel colors are fused to heat-treated and strengthened glass, it can be used for the spandrel portions of curtain walls. The ceramic-like glass used for spandrels (the area between one window and the sill height of the window above) is one of its most expensive forms.

Then there is the exciting new "Pyroceram." "Pyroceram" is a type of glass which has been treated in a particular way to give it a molecular structure similar to that of metals, according to Hunt.¹ It is a glass with a metal-like quality. It weighs less than aluminum (although the first commercial cook wares seem to indicate otherwise) but possesses greater strength and can withstand tremendous amounts of heat as well as sudden changes in temperature. There are, at present, some commercial uses for "Pyroceram" but its most glamorous use is in guided missile radomes. In other words, glass can be made to approximate the character-

istics of metals or ceramics and still retain its most interesting quality, namely, that of transparency.

The above not-too-exhaustive listing shows glass in its variety of shapes and types. And there is a promise of more developments yet to come. This, of course, increases the problem of determining which variety is most appropriate for a given situation. It can be said that some of the controversy can be traced to the failure to use the right type of glass or glass produced to cope with a given problem. While glass makers have come forth with a metal-like "Pyroceram," the metal producers have been working toward the development of transparent metal alloys.² The confusion will be heightened considerably as glass comes on the market which retains its transparency but assumes the characteristics of a metal. In other words, we may well enter a period when glass will be similar to some metals and some metals will be similar to glass.³

Three Major Problems

An analysis of modern "glassical" structures will show that the three major problems are: (1) control of daylighting; (2) solar heat gain during the hot months; and (3) interior heat loss in the cold months. These are the primary sources of much of the controversy over the glass curtain wall. The debate on aesthetics, the fragility of the material, and the special maintenance problems of cleaning and replacement are of lesser magnitude or offer, at least, less objective grounds upon which to proceed with the analysis of the glass curtain wall.

1. Daylighting

It was mentioned previously that the transparency or translucency of this material permits the entry of an abundance of "free" daylight as an inexhaustible primary source of interior lighting. This same characteristic can create difficulties as well. Daylight is a raw source of light; it has to be treated to be converted into something useful. There is the problem of distributing it across the enclosed space. Glare from direct sunlight, the sky or even reflected ground light creates discomfort and precipitates visual fatigue and, therefore, must be eliminated. In other words, raw daylight must be harnessed to enhance its value. It can be argued that the cost of controlling and transforming daylight to a desirable and fairly constant primary source of in-

terior lighting makes it anything but "free" for the reaching to the out-of-doors. Much of the controversy over glass as the predominant curtain wall material is related to the daylighting versus electrical-illumination-from-man-made sources debate.

The problem of daylighting schools has been the subject of many papers and, therefore, could hardly be given its just due as merely a part of the discussion of the material which makes daylighting possible. The advantages of single-story construction over multiple-story construction in the control of daylighting has been amply demonstrated. Orientation of the building helps in controlling daylight. The installation of a secondary source of natural light can improve the lighting distribution across a room. Likewise, overhangs, light-directing glass block, and exterior fixed or flexible louvers have demonstrated their contributions to the improvement of the quality of daylighting.

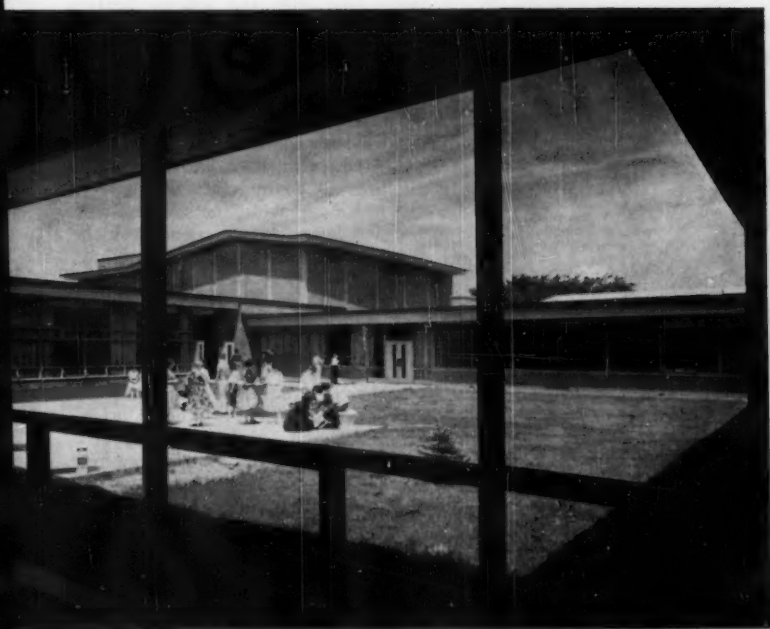
If the sun would stand still in the sky or at least follow the same pattern throughout the season, the solutions to daylight control would be greatly simplified. The problem of varying angles of the sun during the day as well as during the various seasons of the year greatly complicates the issue.

One must pay the price for pursuing the siren call of "free" or "inexpensive" daylighting from that inexhaustible light source, the sun. Ordinary window glass will admit daylight to rooms but will hardly control it. On the other hand, light control during the daylight hours when school buildings are used most often cannot be ignored even by those who choose to put major reliance on electrical sources of illumination unless, of course, the school building is a masonry cave or opaque curtain wall cave. Some architects simply give up searching for an adequate solution of daylighting control and design windowless structures to exclude daylight. But this is running away from a problem rather than solving it. As Hunt⁴ declared: "Psychologically, the building of a cave above ground seems more suitable to Neanderthal man than the sun-seeking man of today. Serious personnel problems can result from the elimination of any possibility for the worker to escape, at least in spirit, from his hive." And if it's a cave that we want, why is it necessary to stay above ground when in these tense times of the A- and H-bombs one's burrowing instincts are to be revived again?

¹William Dudley Hunt, Jr., *The Curtain Wall* (New York: F. W. Dodge Corp., 1959).

²*Ibid.*
³*Ibid.*

⁴*Ibid.*



"To some . . . glass is a way to escape from the confines of a room; it creates a feeling of oneness with the out-of-doors; it provides a flood of daylighting of interior spaces . . ."

2. Solar Heat Gain

The sun which produces daylight also creates heat. As a popular song once insisted, "you can't have one without the other." The solar energy, unless it is intercepted through one of many devices, can significantly increase the heat of the building during the warm or hot months as well as producing glaring or uncontrolled light. In addition, ordinary single-glazed glass has poor insulating characteristics so that during the winter, heat finds it much easier to escape through a glass wall than through an insulated metal panel wall or a masonry wall.

The solar heat gain through the glass façade is not one to be ignored even in the Midwest and North. The average hours of sunshine daily in the Midwest during the winter months of December through February is about 5 to 5½ hours. There is no problem of solar heat gain during this season. But, of course, as the number of hours of sunshine increase, so do the solar heat gain problems, particularly in the southern latitudes. It will cause some uncomfortable moments during at least May and September of the regular school term. The extended school year with enrichment and remedial opportunities means more extensive use of buildings during the hot season. The need for heating a building during the cold season is not questioned, but most states have not as yet accepted the responsibility for cooling a building when it gets too hot and uncomfortable for most efficient human learn-

ing. But there is hope that this may change. In San Angelo, Tex., the average high temperature from April through October is 88.8 degrees. The new San Angelo High School was designed so that all of the buildings on the campus-type school were completely air conditioned.

Some would argue that the common acceptance of air conditioning for schools will merely intensify the controversy over "glassicism." The cooling load is far greater where glass walls are featured instead of the traditional masonry walls or the variety of insulated metal curtain walls. Architects and glass makers have not ignored this problem. Special devices and new types of glass have been developed to cope with solar heat gain. The solutions have met with varying degrees of success.

One approach is based on preventing solar energy from reaching the glass wall. Sun shields, advocated by Le Corbusier and brought into greater prominence by Niemeyer, do help. Exterior sun control devices are planned to stop the solar heat outside the building. But this is easier said than done for the shielding devices must be designed to cope with a variety of sun angles expected during a given day and for a particular exposure. As the seasons change a new set of variables are introduced. And, of course, it's imperative that the solar heat control devices do not interfere with daylighting and do not impair the view to the outside. One writer has pointed out that it has been demonstrated that proper solar

devices can reduce the cost of installation of air conditioning equipment by 15 per cent or more.⁵ Edgar Stone, whose American Exposition Building at the Brussels World Fair gained so much favorable comment, declared that a typical exterior grill to control daylight through the glass walls of a University of South Carolina dormitory cost about \$1 per square foot in place. This was supposed to be about the same per square foot as for Venetian blinds. The typical Stone grill in front of glass was said to have reduced the air conditioning load by one third.

Exterior sun shades increase building cost and, of course, create new maintenance problems. A comparatively inexpensive approach which is best suited for single story design is based on planting trees or shrubs in appropriate places to serve as sun shields. The exterior fixed solar heat control devices function efficiently only for a few days a year, work with limited efficiency for a few weeks and for all practical purposes cease to function for the rest of the year.⁶ The introduction of flexible exterior sun controls carries with it an additional cost plus special attention for adjustments which take time and effort and for that reason may be neglected.

Interior sun control devices such as Venetian blinds, drapes, or curtains, are more commonly used to combat solar heat gain during the warm and hot months. The effect of

⁵Ibid.
⁶Ibid.



shading glass with Venetian blinds (with slats at a 45 degree angle) is evident from the following data. Assume 2000 square feet of wall space. The time is August 1, and the room is at 80 degrees temperature in a 35° north latitude location. The solar heat gain through ¼-inch clear glass wall with a south orientation would be 174,000 BTU's per hour, and with a west orientation would be 450,000 BTU's per hour. If Venetian blinds were used to completely cover the ¼-inch glass over the 2000 square feet of wall space, the solar heat gain would be reduced to 114,000 BTU's per hour for the south wall and 292,000 BTU's per hour for the west wall. The heat gain per hour is about 35 per cent less when the window wall is covered with Venetian blinds. Clearly then, interior shielding can reduce solar heat gain but it should be obvious that it does so at the cost of reducing the amount of daylight (which may not be serious with intense sunlight) and of course, obstructing the vision through the glass.

Heat-absorbing glass can likewise be employed to reduce solar heat gain. Whereas ordinary glass will exclude only about 12 per cent of the solar heat, heat-absorbing glass (depending upon its thickness) can exclude about 39 per cent to 45 per cent. Heavily-tinted glass with low percentages of transmission can likewise reduce solar heat gain to some extent. Double-glazed glass, which incorporates heat-absorbing glass as one of the two panels, can reduce the

solar heat gain even further. Glass block, particularly glass block with a diffusing panel within its cavity, is even more efficient than the various types of single or double glazed clear, tinted, or heat-absorbing glass in reducing solar heat gain.

The largest or most intense solar heat gain will be experienced on the west side of the building. The next largest solar heat gains will be registered on the east face followed by the south wall of the building. In contrast to the winter months, the north wall presents the least difficulty with solar heat gain during the hot season.

If the all-glass façade is to be used, the architect must be prepared to meet the special needs of each building face to minimize solar heat gain. This is particularly important for school plants in the southern latitudes during the regular school year and in most latitudes if the building is used during the summer.

3. Winter Heat Loss

It is one thing to prevent solar heat from entering a schoolroom during the late spring or summer, and still another to prevent building heat from escaping during the winter months. The external solar heat control devices contribute practically nothing to the retention of heat within the building. The single-glazed colored glass or heat-absorbing glass likewise contribute little to the heating efficiency of a building during the winter months. These two factors indicate the need for recognizing that

solar heat gain and interior heating loss must be analyzed separately. Double glazing or glass block can work to prevent solar heat gain and winter heat loss.

Solar heat gain was most pronounced for the west, east, and south walls. In the northern latitudes where the prevailing winter breezes are from the north and west, the severest winter heat losses are experienced on the north and west faces of the building. Actually, during the winter season solar heat gain is desired and it is imperative that external solar heat devices be designed so as not to create a disadvantage during the winter months. It can be said that an all-glass façade with a southerly orientation presents the least difficulty with heat gain during the summer and heat loss in the winter.

The heat loss of a single glazed curtain wall is about ten times that of the loss through an opaque, insulated curtain wall. A four-hour masonry wall, likewise, has a heat loss, during a typical heating season, five times that of an opaque, insulated curtain wall. Double glazed window walls show an improvement over the single glazed but still experience a heat loss which is five times the loss of an opaque, insulated curtain wall. It must be conceded that a building ensheathed with a windowless curtain wall with adequate insulation is more efficient to heat than others. But decisions for building designs are based on a number of factors of which heating-cooling efficiency is only one.

The heat loss through a double glazed wall is about the same as through a four-hour masonry wall. The heat loss through a single glazed wall is about twice that of a four-hour masonry wall. The "U" factor (over-all coefficient of heat transmission in BTU per hour per square foot per degree Fahrenheit) of "Thermopane" or glass block is actually lower than that for a six-inch monolithic concrete wall. Where heating costs are high and a glass wall is desired, the additional costs of double or triple glazed windows might well be justified if only for the north wall of the building.

Summary

No attempt has been made to resolve the controversy over the use of glass in contemporary architecture. The emphasis has been on the major problems encountered in modern "glassical" design, namely daylighting control, solar heat gain, and winter heat loss. It is hoped that spotlighting the areas of controversy may stimulate new ways of tackling and resolving the problems. ■

The Federal School Aid Tangle

ELAINE EXTON

House approval* of a \$1,300,000,000 four-year school construction bill has set a precedent and brought a general federal aid for public education measure closer to enactment than ever before. But the 206 to 189 roll call on H.R. 10128 as amended which sent the legislation sponsored by Representative Frank Thompson, Jr. (D., N. J.) to the Senate with a 17-vote margin didn't assure final passage.

Bias Ban

The antisegregation amendment proposed by Representative Adam Clayton Powell (D., N. Y.) which was approved three times during the course of floor debate (126 to 108 on a standing vote, 151 to 103 on a teller vote, and 218 to 181 on a roll call) has resulted in a parliamentary situation so tangled that it may be impossible to unravel all the snarls in the time remaining before Congress adjourns.

Prior to its adoption, a pro-segregation amendment offered by Representative Phillip Landrum (D., Ga.) to assure the aid would be administered without interference with state laws and local policies regarding public education lost by a standing vote of 151 to 78.

Addition of the Powell Amendment proved to be an insurmountable hurdle to enactment of a school construction measure in 1956 and 1957, and again many of the representatives who oppose federal aid in principle used this device as a vehicle to stall the bill.

In tendering his amendment which provides that "the school facilities constructed with the assistance of payments

received under this act shall be available to students without regard to race, creed, color, national origin, or religion, in accordance with the decisions of the United States Supreme Court," Congressman Powell who represents Harlem in New York City stressed: "I am using this amendment, not to kill the bill, but because, if this amendment is not in it, I cannot vote for federal aid to education, because it would be considered a vote against civil rights."

Citing a letter from the White House to bolster his contention that the only recourse to guarantee that the Supreme Court decision is followed is by adopting this amendment, Congressman Powell challenged that to vote against it "is a vote against the Supreme Court."

Now the second-ranking Democrat on the House Education and Labor Committee, Representative Powell, according to precedent, is in line to succeed Representative Graham A. Barden (D., N. C.), the present chairman, who has announced his intention of retiring from Congress at the end of this year.

Teachers' Salaries Sidetracked

Two other explosive issues — teachers' salaries and aid to private schools — were ruled out as "not germane" to the pending school facilities bill by the presiding officer, Representative Aime J. Forand (D., R. I.), who was in the chair during most of the debate.

So eager were the friends of federal aid to produce a veto-proof measure that President Eisenhower would sign that when Representative Lee Metcalf (D., Mont.) proffered an amendment that would substitute the McNamara bill, S. 8, as it passed the Senate, including teachers' salaries, as a purpose for which the federal funds could be expended by the states, Congressman

Cleveland M. Bailey (D., W. Va.), the chairman of a General Education Subcommittee of the House who is personally in favor of federal aid for teachers' pay, raised a point of order against it.

This was sustained by the chair chiefly on the ground that "no motion or proposition on a subject different from that under consideration shall be admitted under color of amendment" — a House Rule dating back to 1822.

Private Schools Ruled Out

An amendment introduced by Representative Roman C. Pucinski (D., Ill.) to provide up to \$48,750,000 for loans for the construction of private, nonprofit elementary and secondary schools in each state for each fiscal year of the pending bill's duration shared a similar fate when objected to by Congressman Bailey.

This time the chair's decision was largely predicated on a finding that "the bill under consideration has to do strictly with public schools and under the definition of 'state educational agency' it recites very clearly that 'state educational agency' means the state board of education or other office or agencies primarily responsible for state supervision of public elementary and secondary schools."

Representative Clement J. Zablocki (D., Wis.) expressed regret that this ruling had "effectively closed the door" to consideration of a similar amendment he had sponsored which would set aside 15 per cent of the yearly \$325 million authorization in H.R. 10128 for assistance to children attending nonpublic schools.

He criticized the allocation-distribution formula in the Thompson bill, questioning whether "there is any justification for counting all school children in allocating funds to the several states, and then counting out the children attending non-public schools in the distribution of that aid within each state."

A few days earlier a press release from Protestants and Other Americans United for Separation of Church and State announced that they "would go to the courts if necessary and challenge as unconstitutional any 'sectarian rider' to educational bills now being considered in the House if any amendment attempts to confer any financial benefits on parochial schools for building construction."

State and Local Matching Added

In a move to make his bill more palatable to the Administration, Representative Frank Thompson (D., N. J.) submitted two amendments which were adopted by a standing vote of 112 to 87. One extends the duration of his bill (H.R. 10128) from three years to four (at \$325 million per year).

The other requires matching on a state and local basis in the program's first two years and on a state basis in the last two — a provision Mr. Thompson said not only "conforms to the principles set forth in the (1957) Kelley bill (but) is in essence the program re-

(Continued on page 29)

*For additional details about the contents of House bill 10128 and S. 8, the Senate-passed school aid measure, see "The Federal School Aid Impasse" in the January, 1960, *School Board Journal* (pp. 42-43) and "New Federal Aid Developments" in the April, 1960, issue (pp. 42-43).

the AMERICAN SCHOOL BOARD JOURNAL

A SUMMER JOB

IN MOST school systems the purchase of school equipment and books and the replenishment of the needed stocks of teaching materials and housekeeping supplies is a time-consuming summer vacation task of the school administrative staffs and the school boards.

It is unfortunate that both school boards and the school trade believe that the sellers and buyers of articles and services for schools have diametrically opposed points of view growing out of irreconcilable interests. It is true that the manufacturer and distributor of school supplies and equipment must make a profit in order to exist and continue in business. And the school buyer has the responsibility to make the school dollar go as far as possible in his purchases. But underlying these duties is a deeper one which keeps both seller and buyer from going to extremes and which reconciles their work objectives. It is the serious social responsibility which both share of providing teachers and pupils with books, furniture, equipment, and teaching supplies which have basic educational values. Neither can meet his responsibility if the seller seeks an unreasonable profit or conducts his business in an unethical way, and if the buyer drives down the price or demands other conditions of purchase which prevent the seller from continuing in business with a reasonable income. There is in reality a strong mutuality of interest; both must consider themselves educators who are seeking educational usefulness which, in the words of Ralph Elliott, is "the priceless ingredient" in all articles sold to and bought for the schools.

SERVING GIFTED CHILDREN

A REPORT of the Western New York School Study Council, issued in April, provides a useful insight into the growing practice of public school systems to provide gifted children with opportunities to service enriched instruction and to move forward in their education at an increased rate. Ten school systems ranging from a large city — Buffalo — to a small rural elementary school and a rural high school, all in a small cluster of eight counties, provide an amazingly wide variety of approaches and practices for giving desirable service to children of superior ability. Clearly most of these schools have met the problem on their own initiative and worked out such solutions as local conditions, available staffs, and the inventiveness of the administrations made possible. It is clear that the boards of education supported the efforts of supervising school heads and authorized testing programs, homogeneous grouping and "tracking," added equipment and reading materials, and allowed teachers to cut through old rigid examinations and promotion plans to achieve flexibility and to secure co-operation of teachers and parents.

The achievements of the schools in Western New York State can be found to be duplicated in numerous areas across the country. The programs are not of equal effective-

ness or value — it will require as long as a decade to verify the long-range results and to eliminate the causes of minor inefficiencies and errors. The task of school boards everywhere is to give sympathetic support to the proposals of their superintendents. The effective programs for gifted children are a needed democratic development of local schools.

FINANCING SCHOOL PLANTS

IN THESE days of increasing school bonding problems and bond-election failures, it is refreshing to study the plans of a city school district which is definitely working toward a pay-as-you-go plan of keeping its school plant definitely up to standard in the amount and quality of facilities needed in a growing community.

The Lima, Ohio, plan was initiated in 1956 when the board of education, on the basis of a survey of existing school-plant conditions, outstanding capital debt, and plans for the future expansion of the instructional program for its growing population, adopted a three-step, 25-year-term schedule of operation. The first step included a \$3 million bond issue for the remodeling of existing school buildings and the erection of six elementary schools. The second step involved a bond issue of \$3.52 million for the erection of a new high school and the purchase of sites needed in growing areas. Both steps included increased levies for debt service and for direct outlays for the projected new buildings.

The policies of the school board had the approval of the voters and of the City Planning Commission which agreed with the school authorities in their projected long-range plans for added classrooms, sound maintenance outlays for the existing schools, and adjustment of the school plants to changing school organization and instructional plans. The school board's plan, looking to the third step to be arrived at about 1972, when the district will be debt free, anticipates full acceptance of the idea that school building construction is a continuous problem which can be met most economically by frankly facing the needed tax burden, adjusting the millage to the existing construction needs, and avoiding the heavy interest charges on bonds and other borrowing.

In the promulgation of its fiscal policies, the board has had the support of the industrial and commercial interests, of labor, and of the citizenry in general. Increase of two mills voted some years ago has met with favor. Of course, the community has had the example of other Ohio cities to look up to. Cleveland, the largest city, has been debt free for years because it initiated a pay-as-you-go plan 25 years ago. Toledo and Canton have used the plan with success.

Most cities are not as fortunate as Lima, which in 1956 had a relatively small school debt and which enjoyed sound fiscal leadership in its board of education and its superintendent. But nearly every city that has the will can move in the direction of paying for a growing proportion of its needed new schools from current funds.

To fulfill its function, adult education must be as old and stable as truth and as new and refreshing as inspiration. For it is both a tradition and a revolution. Its history is determined by the needs of mankind, while its destiny beckons onward to the future. It is universal and yet it is also particular to time and place. Nations and ages make demands according to their hunger, and express themselves as to their own being, but at the same time contribute their share to civilization and humanity. — *Eric J. Patterson.*

WORD FROM WASHINGTON

(Concluded from page 27)

quested by President Eisenhower in his 1957 message on education."

Equalization Formula Loses

In a further concession to the Administration, Representative Carl Elliott (D., Ala.) introduced an equalization amendment specifying that two thirds of the money grants be funneled to the neediest states, a proposal he described as "the same as the amendment in the Senate bill (S. 8) except that in the Senate bill the allotment per school-age child in the poorest state varies by three times instead of twice that of the wealthiest state."

This won by 130 to 112 on a teller vote, only to be later shouted down by voice vote during the final consideration of the bill. The reversal was attributed by some seasoned observers to last-minute efforts of federal aid strategists to obtain big-state support in a fight to defeat the Powell Amendment.

A two-pronged substitute for the Elliott amendment sponsored by Representative Albert H. Quie (R., Minn.) sought to change the allocation formula in the Thompson bill to one which would distribute the funds on the basis of public school enrollment instead of school-age population and deny aid to "the wealthy states which have an income greater than \$9,000 per child enrolled in public school." This, too, failed to carry.

Two attempts were made by the ranking minority member on the House Education and Labor Committee, Representative Carroll D. Kearns (R., Pa.) to have the Administration's "stretched out" debt service plan (embodied in H.R. 12259) made the focus for consideration. He first sought to do this through a substitute amendment which lost on a voice vote and later through a motion to recommit the Thompson bill (H.R. 10128) to the House Committee on Education and Labor with instructions to report out the 1959 Administration bill in its place. This was torpedoed by a roll call vote of 80 to 319.

In a surprise development, a proposal backed by Representative Frank T. Bow (R., Ohio) was temporarily substituted for the Thompson bill by a teller vote of 154 to 129. The Bow amendment, which would have returned to each state for purposes of school construction two cents of the eight-cent federal tax collected on each package of cigarettes sold in the state, was later beaten by a 219 to 181 roll call vote.

Areas for Compromise

The major points of difference between the House and Senate versions left latitude for trading. Under Representative Thompson's measure as amended, for example, the federal share could total \$1,300,000,000 over a 4-year period (\$325 million annually) as compared with a federal contribution of \$1,856,000,000 over a 2-year period under the amended bill of Senator

McNamara (\$20 per school-age child for each of two years, or about \$917 million annually).

Whereas the Senate on February 4 adopted an NEA-backed amendment which gives the states the choice of using federal funds for paying teachers, or building classrooms, or both these purposes, the House bill limits the federal aid to school construction. On the other hand the antisegregation provision which won acceptance in the House is not included in the Senate's school aid measure.

Significant differences in the methods specified for apportioning and distributing the federal money pose other knotty problems. H.R. 10128, for instance, provides for allotments to the states based

on school-age population (5-17 years), while under S. 8 the money would be allocated to states according to an equalization formula that would grant \$10 per child of school age (5-17 years) in the wealthiest states and \$30 per school-age child in the poorest states; with the other states ranging between these amounts.

Matching arrangements likewise differ in some respects. Under the House version, for instance, each state has the option of either matching debt service commitments to pay the principal and interest on bonds to finance school buildings (the plan that the Administration favors) or matching capital grants to finance school construction. In S. 8 only the last-named route is sanctioned. ■

FINANCE REQUIREMENTS

(Continued from page 17)

should be given to the creation of ways in which private individuals can more perfectly register their demand for educational services.

Double Taxation

Undoubtedly, there are many conceivable ways in which one might attempt to capture what I have labelled the private demand for education. A system of double taxation in support of schools—one which taxes the public at large and one which taxes only the parents of children in school—might be a step in that direction. The objection to such a proposal, of course, is that the public at large might attempt to shift the entire burden of education onto parents; the net expenditure effect of the program is uncertain unless a way is devised to insure continued support by the general taxpayer.

A second possible way of capturing the private demand for education would be to standardize the curriculum offered in terms of available school revenue and then offer special services such as smaller than average classes, more highly qualified teachers, a broader curriculum, extracurricular activities, and increased individual attention, at cost. Consumption of these extra or special services would be at the option of parents and students, provided they are willing to pay the necessary price.

Lower Threshold Cost

A third possible device for converting consumer income into school revenue would be to lower the threshold cost borne by parents when they send their children to either a better public school or to a private school. This could be accomplished by making transferrable, in part or in whole, the foundation level of local and state support, believed to be essential as a minimum for a good education, to any accredited school, regardless of its location, religious affiliation, or motivation, with respect to profit. It follows, from the nature of the demand for education, that those parents who cannot afford to bear the entire cost of sending their offspring to

a different and, hopefully, in terms of their own child's needs, a better school would be more able to do so. An act which would appear to be justified on the grounds of equity, alone, would have the indirect effect of attracting private resources into the field of education. While these resources might not be entirely net in those areas where a substantial proportion of the school population are already attending private schools,⁷ in the long-run there is no telling what an *Affluent Society* might be willing or induced to spend on education, especially if it became the thing to do.

Specialization and Competition

This proposal is not meant to be a case for private schools as opposed to public schools; the transfer of funds, for that matter, could be made applicable only to public schools. Rather, the essence of the proposal is to make elementary and secondary schools, in general, more competitive⁸ and, where the size of the population warrants it, more

⁷Clearly, fees that could be levied by public schools on nonresidents, in addition to the public funds allowed to be transferred, would represent a net gain. Since it is unlikely that transfer funds could be made available only to students who could not otherwise attend nonpublic schools, some private revenue might have to be "replaced" by increased public revenues as parents who are already sending their children to nonpublic schools take advantage of the transfer privilege. The necessary condition for the gain, net of replacement revenues, to be positive, is that the private demand for education be elastic or that a system of price discrimination be instituted. While little is known about the price elasticity of demand for private education, one can infer that the income elasticity of demand is quite elastic from the trend in non-public enrollment. A high income elasticity of demand increases the likelihood of a high price elasticity. Educational institutions, particularly at higher levels, are notorious price discriminators: this is attested to by the extensive issuance of scholarships based on need. Ways could probably be devised to capture most of the area under the private demand for education even if the demand were inelastic. Further, it is entirely possible that the public attention generated in the political process of making transfer funds available to private institutions might, in itself, increase the private demand for education—the willingness of individuals to spend more for education and less on other things.

⁸See: Milton Friedman, "The Role of Government in Education," *Economics and the Public Interest* (New Brunswick, N. J.: Rutgers University Press, edited by Robert Solo, 1955).

(Concluded on page 32)

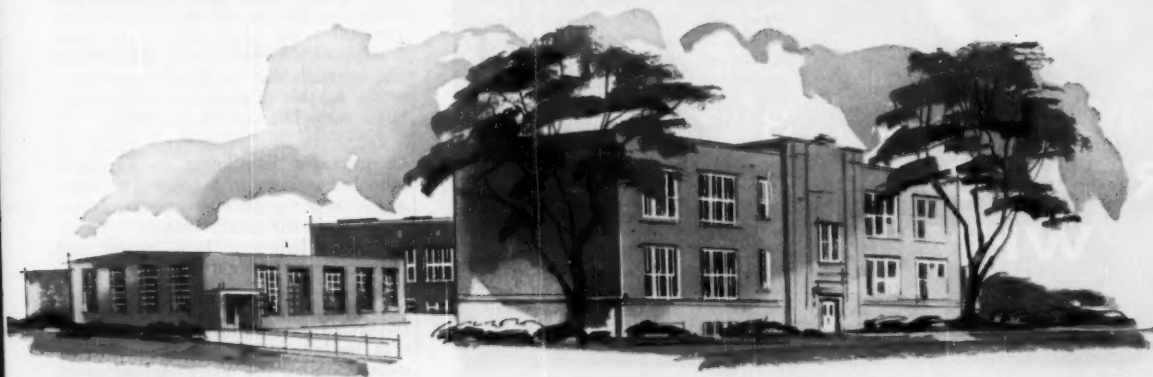
Mr. Stanley Buchacz, President of Justice
School District No. 109, Justice, Illinois, says:

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Mr. Stanley Buchacz, in one of the classrooms in Justice Elementary School. A thermostat on the wall keeps the temperature just right for more take-home learning.

students concentrate better on the classroom wall"



Honeywell wall thermostats keep classrooms in Justice Elementary School uniformly comfortable. This makes for more take-home learning and prevents wasteful overheating.

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(Concluded from page 29)

specialized.⁹ It would, of course, necessitate the development of standards with which to appraise the performance of individual schools as opposed to standards which measure only the relative performance of individual students within a school, but such standards are necessary anyway if the public is to be informed of the educational output it is getting for its money.

It might be charged that this particular proposal will weaken the public schools. An examination of factors determining the magnitude of public expenditures on education at the state level, however, renders very inconclusive the assertion that the trend toward non-public schools in some states has weakened the public schools financially.¹⁰

Other things equal, the effect of an increased enrollment in nonpublic schools has been to increase the funds available per pupil in average daily attendance in the public schools.

In the long-run, both public and private schools would be better off to the extent that the increased flow of resources bids up the price of such factors of production as teachers and, thus, tends to attract into the profession more qualified personnel. According to the "Rockefeller Report on Education":

The root problem of the teaching profession remains financial. More perhaps than any other profession, teaching needs dedicated men and women to whom pay is not an overriding consideration; but until we pay teachers at least as well as the middle echelon of executives, we cannot expect the profession to attract its full share of the available range of talents.²¹

While the proposals that have been briefly outlined may seem politically untenable as far as many communities are concerned, they will have served their purpose if ways have been pointed to in which education can be made to contribute its fair share of the gross national product. ■

⁹The famed Bronx High School of Science is an example of how schools particularly at the secondary level, might become more specialized.

101n. "The Expenditure Effect of State Aid to Education," The University of Chicago Office of Agricultural Economics Research Paper No. 5808, May 5, 1958, I took the occasion to relate current expenditures per pupil to three possible determinant of differences in expenditure. The least-squares relationship that I obtained (p. 4) is as follows: Where:

X_1 = annual current expense per pupil in average daily attendance, by states, 1949-50
 X_2 = X_1 multiplied by the percentage of total revenue receipts obtained from the state.
 X_3 = per capita income payments by states in ten of dollars, 1949.
 X_4 = percentage of state population that is non-white, 1950.
 (for the 48 state observations)

$$(1) X_1 = 25.694 - .1637X_3 - 1.4287X_2 \\ \quad \quad \quad (.089) \quad (.178) \\ \quad \quad \quad -.8942X_4 \quad (r^2 = .808) \\ \quad \quad \quad (.421)$$

An examination of the residual variation in equation (1) does not reveal a further correlation between current expenditure per pupil in the public schools and the proportion of the school aged population attending nonpublic schools. Of the eighteen states having the highest proportion of their school aged population attending nonpublic schools, nine have positive residuals and nine have negative residuals.

²²*The Pursuit of Excellence, Education, and the Future of America*, (Garden City, New York: Doubleday, 1958), p. 25-26.

THE SCHOOL SCENE

(Concluded from page 6)

grant, include grouping of pupils for instruction, development of teaching teams, development of flexible scheduling, re-deploying of space of instructional areas, and placing of greater responsibility on the learner for his own learning.

The plan offers a challenge of certain aspects of education, including the self-contained classroom, the size of the instructional group, standard classroom size, and a uniform recitation period. It calls for more specialization on the part of teachers and the use of forms other than the textbook as the basis of the study course.

PRAISES TEACHING MACHINES

Teaching machines can free college professors from some routine drudgery and enable them to increase the amount of knowledge to be taught, an authority on self-instructional devices said at the University of Texas.

Dr. Nicholas A. Fattu of Indiana University said one reason universities exist is to advance knowledge. When instructors are overloaded with routine duties, he said, "we misuse their talents at a time when we can no longer afford to misuse them."

Basic features of all types of teaching machines, Dr. Fattu said, are continuous student activity, prompt "feedback" as a basis for correcting errors, and opportunity for the individual student to proceed at his own rate. He said the teaching machine is "merely a theory of instruction translated into a mechanical form." He said it is a natural development in an age of total mechanization.

PRIVATE SCHOOLS WIN BUS SERVICE

Legislation guaranteeing private and parochial school pupils the same free transportation provided for those attending public schools has just been approved by Governor Rockefeller of New York State. The new law, to become effective for the 1961-62 school year, makes it unnecessary for parents of private or parochial pupils to make a formal plea for free transportation. Parents also will be able to complain directly to the Commissioner and he must grant their request.

The new law increases from eight to ten miles the distance between home and school over which public transportation must be provided for both public and private school pupils.

SETS DEADLINE FOR DESEGREGATION

Federal District Judge J. Skelly Wright, in a ruling in New Orleans on May 16, set September as the deadline for desegregating the city schools. He outlined a grade-a-year plan to be followed by the Orleans parish board.

The order posed a threat to the continuation of public schools in New Orleans because of the conflict with the Louisiana anti-integration law. The city is the first to choose its future action.

CONTRACTS AWARDED FOR EXTERIOR LIGHTING

The Chicago board of education has awarded contracts totaling \$68,036 for exterior floodlighting around 13 elementary and two high schools. The work is part of a long-range program to illuminate areas around schools as a deterrent to vandalism and loitering. Of 450 schools, 330 now have exterior lighting.

ACME CHEMICAL?

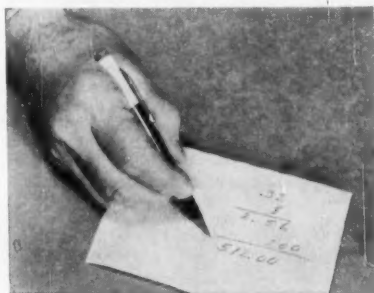
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With them, quality comes first. I've never known Acme Chemical to skimp on the quality of a product to meet a price. Yet the price is always fair . . . and considering how far an Acme Chemical product goes, price doesn't mean as much to us as *use cost*.

Take their Acco-Kleen. Acco-Kleen is Acme Chemical's all-purpose liquid cleaner. We use it everywhere in our buildings. Formerly we bought an all-purpose cleaner that was a little lower in price but we had to use 4 cups to every pail of water in our daily cleaning. With Acco-Kleen we use 2 cups — and get perfect results. We're saving 32¢ on every pail of solution, and we average 8 pails a day. Multiply that by 200 school days in the year and you'll know

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NEWS of PRODUCTS for the Schools

REDESIGNED TYPEWRITER

The new Remington standard typewriter has been redesigned for maximum appeal to the eye and hand of the typist. Its "responsive touch" makes it easier and smoother to operate than other manual typewriters, according to Remington Rand, a division of Sperry Rand Corp., New



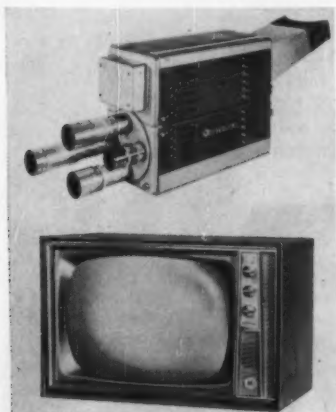
Flat Eraser Shelf

York 10. It is offered in a wide variety of pastel colors to complement any color scheme. Some features of the machine are: new slide margin stops; Fold-A-Matic construction for rapid breakdown of the machine for cleaning and maintenance; an erasing table behind the platen; transparent card holders; and a removable top plate that facilitates changing ribbons, cleaning keys, and inserting interchangeable type bars. The standard office model is available in more than 100 styles of type.

(For Further Details Circle Index Code 0108)

COMPLETE ETV EQUIPMENT

Five closed circuit television cameras and two monitors for educational and industrial use have been recently introduced by Motorola, Inc., Chicago 51, Ill. Two cameras have only one operating control, an on-off switch, which makes operation possible by nontechnical personnel. The basic, general purpose camera, weighing 12 pounds and measuring 5½ by 7 by 11



Viewfinder Camera and Classroom 21 Receiver

in., comes in four versions. The fifth camera, the Viewfinder (pictured) is for more elaborate studio work. The firm is also announcing two educational monitors. The Classroom 21 is a 21-in. receiver, capable of switching from closed circuit video signal to standard VHF or UHF broadcast signals by turning a single knob at the back of the set. The unit's front mounted loud-speaker can be used as an audio amplifier. Several receivers can be looped on a single coaxial cable. The second model is a 14-in. general purpose monitor. The line includes complete selections of mounting, optical, and distribution accessories to meet all application requirements. Send for details.

(For Further Details Circle Index Code 0109)

LOW-COST ELECTRONIC AID

The Dictaphone Corp., New York City, has adopted its office recording equipment for use in an electronic laboratory. Teachers can pre-record lessons on thin plastic Dictabelt records, each holding 15 minutes



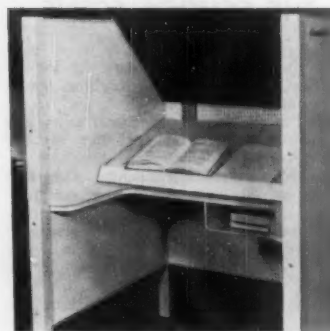
Adapts Office Machines

recording. The Dictabelts, which cost four cents each, can be easily filed and reused again and again. A Dictaphone Time-Master on the teacher's desk serves as both recorder and reproducer. It is connected to each student's desk through individual earpieces. The system has been successfully tested in classes teaching such diverse subjects as languages, history, shorthand, office machines, physical education and shop.

(For Further Details Circle Index Code 0110)

NEW AUDIO TEACHING SYSTEM

The Hamilton Mfg. Co., Two Rivers, Wis., offers a complete new line of audio laboratory equipment including a teacher's master console and several styles of student cibles. The master console has an inclined panel containing all switches for communication, monitoring, sectionalizing, and program selection. It is complete with connectors for tape deck, phonograph, and projector sound track. From a comfortable seated position, the teacher has a view of the entire class with full student control at his finger tips. Transistorized audio equipment operates on 12 volts d.c. The multi-channel equipment permits teaching more than one language at a time. Several styles of student cibles are available, each tested for its own decibel quiet rating. One model has an optional sound damper panel that may be folded down and locked



Student Cubicle

to conceal audio equipment. The folded panel becomes a plastic covered working surface. Other models are designed for use in old buildings with untreated ceilings; one has a budget price; another has disappearing side and front panels.

(For Further Details Circle Index Code 0111)

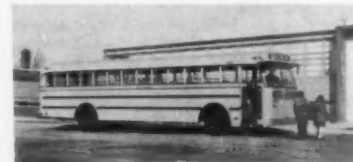
GRAPHIC WALL DISPLAYS

Schools are now being offered an educational display service by the Graphic Exhibitor, Cincinnati 21, Ohio. The exhibit consists of an attractive display of pictures and information, 20 in. wide by 80 in. long, on such topics as exploration of space, cultures of ancient civilizations, contemporary arts, modern politics, new drama, etc. The Graphic Exhibitor is sold on subscription, \$63 per year. The subscriber is sent seven different especially prepared displays, one every six weeks of the school year from September through June. All issues are sent post-paid, ready for wall mounting in the school halls or library. Send for a descriptive brochure.

(For Further Details Circle Index Code 0112)

REAR ENGINE SCHOOL BUS

An International pusher type school bus with 61 to 73 passenger capacity is announced by the motor truck division of International Harvester Co., Chicago 1,



For 61 to 73 Passengers

Ill. The new model 193-RE chassis, designed for high mileage and heavy traffic operation, incorporates heavy-duty components throughout. According to the company, some advantages of its rear mounted V-8 engine chassis are maximum maneuverability and driver visibility, more positive traction and virtual elimination of engine noise and fumes. Basic specifications include a 206 h.p. V-401 engine, wheelbases of 171 or 226 in., air brakes, parking brake, front shock absorbers, and rear springs. Heavier engines and automatic transmission are optional.

(For Further Details Circle Index Code 0113)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

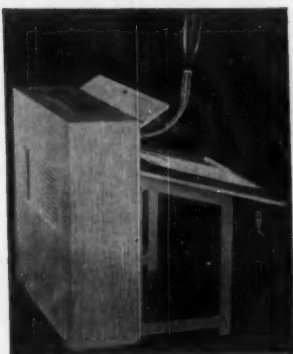
NEW PACK FOR BIOLOGY SPECIMENS

A new packaging adopted by National Biological Supply Co., Chicago 10, Ill., promises more convenient handling and shipping economy for biological specimens used in schools, hospital and research laboratories. A plastic bag in a corrugated box replaces the heavy five-gallon pail for the company's combination-bulk shipments of Bico specimens, which include frogs, crayfish, worms, fish, clams, fetal pigs, rats, and others. The specimens are now packed 12 or 25 to a sealed polyethylene package, shipped in a corrugated box with polyethylene bag liner. A tear tape for easy opening is a feature of the box. The packaging reduces shipping weight by as much as 60 per cent.

(For Further Details Circle Index Code 0114)

PORTABLE P.A. SYSTEM

The Davis Courier is a portable, folding lectern with built-in sound amplifiers. Offered by Davisound Public Address Systems, Madison, N. J., it features high fidelity performance in a compact, lightweight unit. When folded, the unit measures only 5 in. deep by 19 in. high, by 20



Built-in Amplifiers

in. wide. Microphone and reading lamp fold out of the top compartment, ready to use, and do not have to be plugged in. This frees the slanted desk top for papers and notes. The amplification system is designed for halls seating up to 1000 people. Lectern has two built-in loud-speakers, and a 40-watt adjustable lamp. The white oak cabinet comes in a blond, hand-rubbed finish. Optional accessories include a lapel microphone and a nylon cover. Send for illustrated specifications sheet.

(For Further Details Circle Index Code 0115)

EXTRA TALL WINDOW WASHER

A new "extra high" window washer by Tucker Mfg. Co., Cedar Rapids, Iowa, enables an operator on the ground to wash windows at heights up to 66 ft. Model No. 6½ with long, telescopic handles will reach windows on the fourth or fifth floor. The handles can be separated to wash windows at lower levels as well. A wide, flaring brush cleans the corners and trim of windows, as well as the panes. Water from a hose connection mixes with detergent and flows through a hose in the handle up to the window. The company also supplies the compressed detergent

tablets, one of which will last a full half day of continuous window washing. Send for details on the firm's 13 models.

(For Further Details Circle Index Code 0116)

WALL-CLEANING MACHINE

A newly designed, air-powered machine cleans walls more efficiently and in less time than ordinary wall-cleaning methods. The Wall-O-Matic, manufactured by Central States Maintenance Co., Oak Park,



Noiseless Operation

Ill., is a noiseless, nonelectric model which utilizes compressed air for continuous eight-hour operation. All kinds of walls—plaster, brick, painted, stippled—and many types of acoustical ceilings can be thoroughly cleaned with the machine, using a special cleaning solution. The operator needs no special training. Due to its quiet operation and not requiring dropcloths, walls can be cleaned while the room is occupied. A spray nozzle attachment cleans hard-to-reach places and irregularly shaped objects such as pipes and woodwork.

(For Further Details Circle Index Code 0117)

RIDING POWER LAWN MOWER

The new "Turf King 76" is a riding power lawn mower that cuts a swath 6 ft. 4 in. wide and has an adjustable cutting height from ¾ to 2¾ in. Produced by the Jacobsen Mfg. Co., Racine, Wis., the unit is powered by a 3-reel, 9-hp., 4-cycle engine. It features a self-sharpening device



Has Self-Sharpener

for all three reels simultaneously, without disassembly. The mower is recommended for unusual hillside and slope mowing, since the reels can be adjusted singly or in combination to cut up to 35-degree angles or minus 25 degrees. It is designed

for large institutional grounds, cemeteries, and parks. Send for full details.

(For Further Details Circle Index Code 0118)

REMOTE CONTROL SWITCH FOR FOLDING PARTITIONS

An electronic, push-button switch held in the hand can remotely control the opening or closing of Haws electric-hydraulic folding partitions in schools, churches or institutions. The remote control switch weighs only seven ounces, comes in a "pocket-size case" that clips on a belt when not in use. Powered by long-life transistors, the switch enables the operator to move freely ahead of the partition and maintain complete visibility on both sides of the moving unit at all times. Partitions can be opened or closed within any desired distances. A standard safety feature prevents accidentally setting off the switch. It is offered as extra equipment with Haws folding partitions or as an alternate replacing the wall switch. Send for details from Robert Haws Co., Detroit 23, Mich.

(For Further Details Circle Index Code 0119)

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Boulder, Colorado



CUSTOM-LINE Aluminum HAT and COAT RACKS

Tailored to fit any given open or closetted wall area. Smart in design and modern in "clear", "gold" deep etched anodized finishes and combinations. Quality built—closed-end aluminum tubing, rigidly held in cast aluminum brackets that are adjustable for height in dovetailed mounting extrusions. Brackets also adjustable to any desired centers.

3 BASIC SHELVES

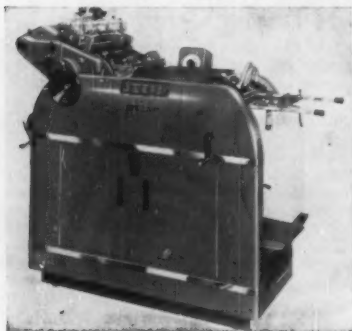


Write for Bulletin CL-206

VOGEL-PETERSON CO.
Rt. 83 and Madison St. • Elmhurst, Ill.

OFFSET DUPLICATOR

The new Multilith Offset Duplicator, Model 2550, adds automation to the offset duplicating process. Designed for simplicity



Automatic Counter

of operation, the new machine will save 65 per cent of a worker's time, according to the manufacturers, the Addressograph-Multigraph Corp., Cleveland 17, Ohio. The process initiates Automatic Sequence Control, consisting of three elements: automatic electrical counter to regulate number of copies required; finger-tip control panel; and self-contained electrical system for maximum programming flexibility. The latter is a removable, one package plug-in electrical chassis for fast, easy servicing and replacement. In operation, the control conditions the master with ink and moisture, images the blanket, starts the paper feed at correct time, counts number of sheets

run, and turns the machine off when the desired number of copies have been run. When step-by-step control of the duplicator is more advantageous, a flick of the switch converts it for manual operation.

(For Further Details Circle Index Code 0120)

CATALOG AND BOOKLETS

Any school system can gain the advantages of modern electronic data processing equipment for all student record keeping, according to a brochure published by Remington Rand Univac Division of Sperry Rand Corp., New York 10, N. Y. The brochure explains the services offered to school administrators through the Univac Service Centers which the company maintains throughout the country.

(For Further Details Circle Index Code 0121)

A new bulletin describes the Herman Nelson Univent gas-fired unit ventilator for use in school classrooms. Send for bulletin 685-A1 from the American Air Filter Co., Inc., Louisville 8, Ky.

(For Further Details Circle Index Code 0122)

"Science Furniture for Schools and Colleges" is a particularly interesting manual from Laboratory Furniture Co., Inc., Mineola, L. I., N. Y. The well-illustrated material includes a catalog of furniture and apparatus for the science rooms, as well as floor plans and diagrams of classrooms.

(For Further Details Circle Index Code 0123)

The 1960 Educational Catalog, from Science Research Associates, Inc., Chicago 11, Ill., offers information on educational and psychological testing, guidance publications and services, science and social studies ma-

terials, and reading development materials. Send for a free copy.

(For Further Details Circle Index Code 0124)

A colorful, new 40-pp. catalog from Gametime, Inc., Litchfield, Mich., illustrates the firm's complete line of park and playground and outdoor sports equipment. Send for a free copy.

(For Further Details Circle Index Code 0125)

A six-page folder describes the portable wood bleachers for outdoor use in the school athletic and public recreation fields made by Universal Bleacher Co., Champaign, Ill. Construction details and specifications are given for both five- and ten-row models.

(For Further Details Circle Index Code 0126)

CORRESPONDING CODE INDEX NUMBERS TO BE ENCIRCLED CAN BE FOUND ON THE CARDS IN THE READER'S SERVICE SECTION

MANUFACTURER'S NEWS

After a disagreement lasting 21 years, the Edwin F. Guth Co., St. Louis, Mo., has settled its differences with the International Brotherhood of Electrical Workers. Now the firm's complete line of Guth fluorescent, incandescents, and Gratelite electric ceilings will be IBEW union made and wired.

A new branch office building will soon adjoin the firm's plant and warehouse building in San Jose, Calif., according to Walter S. Hillyard, president of Hillyard Sales Co., Western division. The firm distributes Hillyard floor treatment and building maintenance products.

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Free-Floating Resilient
Floor System

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July, 1960

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CUT SWEEPING TIME Don't just push dust around—pick it up with SUPER HIL-TONE® surface maintainer, and get rid of it once and for all. Saves labor time—protects against spread of air-borne bacteria—helps save the floor and improves appearance.

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After sweeping, a microscopic non-oily film of SUPER HIL-TONE cushions against traffic wear—saves the wax or finish film—pulls dust out of the air and holds it until next sweeping. Keeps your whole building healthier. A "must" for dust control and labor-saving maintenance.

Sweeping with SUPER HIL-TONE takes a lot less time. You scrub less often. Moreover, the SUPER HIL-TONE film brightens the gloss of your floor finish, protects it, makes it wear longer.



SUPER HIL-TONE is safe on the floor, safe in the mop, safe in storage. U/L listed "classified as to fire hazard".



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Official Rectangular Backboard. 1/4" Herculite tempered glass cushioned in Neoprene. Sturdy metal frame. Medart also makes a ruggedly framed, thick plywood rectangular backboard, a favorite for practice.

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